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NEWS 16 JUN 30 STN AnaVist enhanced with database content from EPFULL
NEWS 17 JUL 28 CA/CAPLUS patent coverage enhanced
NEWS 18 JUL 28 EPFULL enhanced with additional legal status
information from the EPOline Register
NEWS 19 JUL 28 IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
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NEWS 21 AUG 01 INPADOCDB and INPAFAMDB coverage enhanced
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NEWS 23 AUG 15 CAOLD to be discontinued on December 31, 2008
NEWS 24 AUG 15 CAPLUS currency for Korean patents enhanced
NEWS 25 AUG 25 CA/CAPLUS, CASREACT, and IFI and USPAT databases
enhanced for more flexible patent number searching
NEWS 26 AUG 27 CAS definition of basic patents expanded to ensure
comprehensive access to substance and sequence
information

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* * * * * STN Columbus * * * * *

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L1 STRUCTURE UPLOADED

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L2 STRUCTURE UPLOADED

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L3 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 11:09:45 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 3190 TO ITERATE

62.7% PROCESSED 2000 ITERATIONS 20 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 60413 TO 67187
PROJECTED ANSWERS: 300 TO 976

L4 20 SEA SSS SAM L1

=> s l2

SAMPLE SEARCH INITIATED 11:09:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 36 TO ITERATE

100.0% PROCESSED 36 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

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BATCH **COMPLETE**
PROJECTED ITERATIONS: 360 TO 1080
PROJECTED ANSWERS: 2 TO 124

L5 2 SEA SSS SAM L2

=> s 13
SAMPLE SEARCH INITIATED 11:09:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 250 TO ITERATE

100.0% PROCESSED 250 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 4052 TO 5948
PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L3

=> s 12 full
FULL SEARCH INITIATED 11:10:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 499 TO ITERATE

100.0% PROCESSED 499 ITERATIONS 7 ANSWERS
SEARCH TIME: 00.00.01

L7 7 SEA SSS FUL L2

=> s 13 full
FULL SEARCH INITIATED 11:10:13 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5128 TO ITERATE

100.0% PROCESSED 5128 ITERATIONS 10 ANSWERS
SEARCH TIME: 00.00.01

L8 10 SEA SSS FUL L3

=> file caplus
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FULL ESTIMATED COST 358.10 358.31

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FILE COVERS 1907 - 30 Aug 2008 VOL 149 ISS 10
FILE LAST UPDATED: 29 Aug 2008 (20080829/ED)

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<http://www.cas.org/legal/infopolicy.html>

=> s 17 or 18
65 L7
212 L8

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L9 270 L7 OR L8

=> s l9 and (flavivirus or pestivirus or hcv or flaviviridae)

1791 FLAVIVIRUS
886 FLAVIVIRUSES
2079 FLAVIVIRUS
(FLAVIVIRUS OR FLAVIVIRUSES)
512 PESTIVIRUS
272 PESTIVIRUSES
608 PESTIVIRUS
(PESTIVIRUS OR PESTIVIRUSES)
14636 HCV
24 HCVS
14640 HCV
(HCV OR HCVS)
668 FLAVIVIRIDAE

L10 5 L9 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)

=> d bib abs hitstr 1-5 l10

L10 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1151410 CAPLUS

DN 145:336253

TI Synthesis and in vitro anti-HCV activity of β -D- and
L-2'-deoxy-2'-fluororibonucleosides

AU Shi, Junxing; Du, Jinfa; Ma, Tianwei; Pankiewicz, Krzysztof W.; Patterson,
Steven E.; Hassan, Abdalla E. A.; Tharnish, Phillip M.; McBrayer, Tamara
R.; Lostia, Stefania; Stuyver, Lieven J.; Watanabe, Kyoichi A.; Chu, Chung
K.; Schinazi, Raymond F.

CS Pharmasset, Inc., Tucker, GA, USA

SO Nucleosides, Nucleotides & Nucleic Acids (2005), 24(5-7), 875-879

CODEN: NNNAFY; ISSN: 1525-7770

PB Taylor & Francis, Inc.

DT Journal

LA English

OS CASREACT 145:336253

AB Based on the discovery of β -D-2'-deoxy-2'-fluorocytidine as a potent
anti-hepatitis C virus (HCV) agent, a series of β -D- and
L-2'-deoxy-2'-fluororibonucleosides with modifications at 5 and/or 4
positions were synthesized and evaluated for their in vitro activity
against HCV and bovine viral diarrhea virus (BVDV). The
introduction of the 2'-fluoro group was achieved by either fluorination of
2,2'-anhydronucleosides with hydrogen fluoride-pyridine or potassium
fluoride, or a fluorination of arabinonucleosides with DAST. Among the
analogues synthesized, only the 5-fluoro compds., namely
 β -D-2'-deoxy-2',5-difluorocytidine, had anti-HCV activity
in the subgenomic HCV replicon cell line, and inhibitory
activity against rRNA. As β -D-N4-hydroxycytidine (NHC) had
previously shown potent anti-HCV activity, the two
functionalities of the N4-hydroxyl and the 2'-fluoro were combined into
one mol., yielding β -D-2'-deoxy-2'-fluoro-N4-hydroxycytidine.
However, this nucleoside showed neither anti-HCV activity nor
toxicity. All the L-forms of the analogues were devoid of anti-HCV
activity. None of the compds. showed anti-BVDV activity, suggesting that
the BVDV system cannot reliably predict anti-HCV activity in
vitro.

IT 3258-02-4

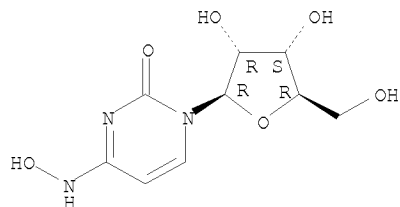
RL: PAC (Pharmacological activity); BIOL (Biological study)
(preparation and anti-HCV, anti-BVDV, rRNA inhibition activity of
 β -D- and L-2'-deoxy-2'-fluororibonucleosides via fluorination of
anhydronucleosides and arabinonucleosides)

RN 3258-02-4 CAPLUS

CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.

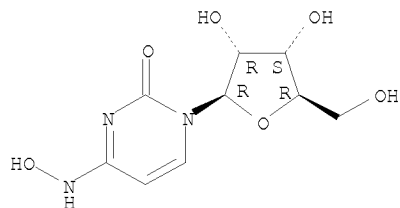
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RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:1065490 CAPLUS
DN 142:147801
TI Metabolism of the anti-hepatitis C virus nucleoside β -D-N4-hydroxycytidine in different liver cells
AU Hernandez-Santiago, Brenda I.; Beltran, Thierry; Stuyver, Lieven; Chu, Chung K.; Schinazi, Raymond F.
CS Department of Pediatrics, Emory School of Medicine, Decatur, USA
SO Antimicrobial Agents and Chemotherapy (2004), 48(12), 4636-4642
CODEN: AMACQ; ISSN: 0066-4804
PB American Society for Microbiology
DT Journal
LA English
AB β -D-N4-Hydroxycytidine (NHC) was found to have selective anti-hepatitis C virus (HCV) activity in the HCV replicon system (clone A). The intracellular metabolism of tritiated NHC was investigated in the HCV replicon system, Huh-7 cells, HepG2 cells, and primary human hepatocytes. Incubation of cells with 10 μ M radiolabeled NHC demonstrated extensive and rapid phosphorylation in all liver cells. Besides the 5'-mono-, -di-, and -triphosphate metabolites of NHC, other metabolites were characterized. These included cytidine and uridine mono-, di-, and triphosphates. UTP was the predominant early metabolite in Huh-7 cells and primary human hepatocytes, suggesting deamination of NHC as the primary catabolic pathway. The intracellular half-lives of radiolabeled NHC-triphosphate and of CTP and UTP derived from NHC incubation in Huh-7 cells were calculated to be 3.0 ± 1.3 , 10.4 ± 3.3 , and 13.2 ± 3.5 h, resp. Studies using monkey and human whole blood demonstrated more-rapid deamination and oxidation in monkey cells than in human cells, suggesting that NHC may not persist long enough in plasma to be delivered to liver cells.
IT 3258-02-4
RL: PKT (Pharmacokinetics); BIOL (Biological study)
(metabolism of the anti-hepatitis C virus nucleoside β -D-N4-hydroxycytidine in different liver cells)
RN 3258-02-4 CAPLUS
CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.



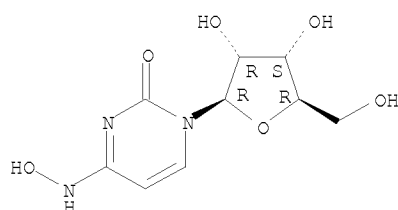
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:26945 CAPLUS
DN 139:381
TI Ribonucleoside analogue that blocks replication of bovine viral diarrhea and hepatitis C viruses in culture
AU Stuyver, Lieven J.; Whitaker, Tony; McBrayer, Tamara R.;

McIntosh

Hernandez-Santiago, Brenda I.; Lostia, Stefania; Tharnish, Phillip M.; Ramesh, Mangala; Chu, Chung K.; Jordan, Robert; Shi, Junxing; Rachakonda, Suguna; Watanabe, Kyoichi A.; Otto, Michael J.; Schinazi, Raymond F.
 CS Pharmasset Inc., Tucker, GA, 30084, USA
 SO Antimicrobial Agents and Chemotherapy (2003), 47(1), 244-254
 CODEN: AMACQ; ISSN: 0066-4804
 PB American Society for Microbiology
 DT Journal
 LA English
 AB A base-modified nucleoside analog, β -D-N4-hydroxycytidine (NHC), was found to have antipestivirus and antihepacivirus activities. This compound inhibited the production of cytopathic bovine viral diarrhea virus (BVDV) RNA in a dose-dependent manner with a 90% effective concentration (EC90) of 5.4 μ M, an observation that was confirmed by virus yield assays (EC90 = 2 μ M). When tested for hepatitis C virus (HCV) replicon RNA reduction in Huh7 cells, NHC had an EC90 of 5 μ M on day 4. The HCV RNA reduction was incubation time and nucleoside concentration dependent. The in vitro antiviral effect of NHC was additive with recombinant alpha interferon-2a and could be prevented by the addition of exogenous cytidine and uridine but not of other natural ribo- or 2'-deoxynucleosides. When HCV RNA replicon cells were cultured in the presence of increasing concns. of NHC (up to 40 μ M) for up to 45 cell passages, no resistant replicon was selected. Similarly, resistant BVDV could not be selected after 20 passages. NHC was phosphorylated to the triphosphate form in Huh7 cells, but in cell-free HCV NS5B assays, synthetic NHC-triphosphate (NHC-TP) did not inhibit the polymerization reaction. Instead, NHC-TP appeared to serve as a weak alternative substrate for the viral polymerase, thereby changing the mobility of the product in polyacrylamide electrophoresis gels. We speculate that incorporated nucleoside analogs with the capacity of changing the thermodyn. of regulatory secondary structures (with or without introducing mutations) may represent an important class of new antiviral agents for the treatment of RNA virus infections, especially HCV.
 IT 3258-02-4, N4-Hydroxycytidine
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (N4-hydroxycytidine blocks replication of bovine viral diarrhea and hepatitis C viruses in culture)
 RN 3258-02-4 CAPLUS
 CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2002:314958 CAPLUS
 DN 136:340939
 TI Preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation
 IN Stuyver, Lieven; Watanabe, Kyoichi A.
 PA Pharmasset Limited, USA
 SO PCT Int. Appl., 230 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2002032920 | A2 | 20020425 | WO 2001-US46113 | 20011018 |
| | WO 2002032920 | A3 | 20040219 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

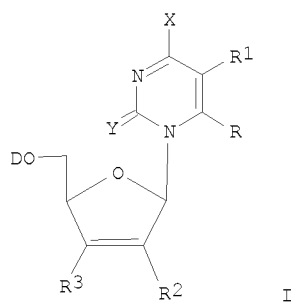
CA 2426187 A1 20020425 CA 2001-2426187 20011018
 AU 2002028749 A 20020429 AU 2002-28749 20011018
 US 20030087873 A1 20030508 US 2001-45292 20011018
 EP 1411954 A2 20040428 EP 2001-987756 20011018

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR

JP 2004533406 T 20041104 JP 2002-536301 20011018
 CN 1646141 A 20050727 CN 2001-820816 20011018
 BR 2001014837 A 20060509 BR 2001-14837 20011018
 AU 2002228749 B2 20080424 AU 2002-228749 20011018
 US 20070031824 A1 20070208 US 2004-854870 20040527
 US 20070196824 A1 20070823 US 2007-686499 20070315
 AU 2007240180 A1 20080103 AU 2007-240180 20071207
 KR 2008041296 A 20080509 KR 2008-707867 20080331

PRAI US 2000-241488P P 20001018
 US 2001-282156P P 20010406
 US 2000-256067P P 20001215
 US 2001-8140 B1 20011018
 WO 2001-US46113 W 20011018
 KR 2003-705461 A3 20030418
 US 2004-854870 A3 20040527

OS MARPAT 136:340939
 GI



AB Modified nucleosides, e.g. I, wherein D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid; X is H, halogen, NH₂, substituted amine, oxime, OH, alkoxy, SH, thioalkyl; Y is O, S, Se; R and R₁ are independently H, alkyl, alkenyl, alkynyl, aryl, alkylaryl, halogen, NH₂, substituted amine, oxime, hydrazine, OH, alkoxy, SH, thioalkyl, NO₂, NO, CH₂OH, CH₂OH, ester, CONH₂, amide, CN; R₂ and R₃ are independently H, halogen, OH, SH, OMe, SMe, NH₂, NHMe, CH:CH₂, CN, CH₂NH₂, CH₂OH, CO₂H; were prepared for treating a Flaviviridae (including BVDV and HCV), Orthomyxoviridae (including Influenza A and B) or Paramyxoviridae (including RSV) infection, or conditions related to abnormal cellular proliferation, in a host, including animals, and especially humans. This invention also provides an effective process to quantify the viral load, and in particular BVDV, HCV or West Nile Virus load, in a host, using real-time polymerase chain reaction ("TR-PCR"). Addnl., the invention discloses probe mols. that can fluoresce proportionally to the amount of virus present in a sample. Thus, (1'R,2'S,3'R,4'R)-1-[2,3-dihydroxy-4-(hydroxymethyl)cyclopentan-1-yl]-5-fluorocytosine was prepared and tested in vitro as antiviral and antitumor agent.

IT 13491-41-3P 13491-47-9P 402725-23-9P
 415705-01-0P 415705-11-2P
 RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN

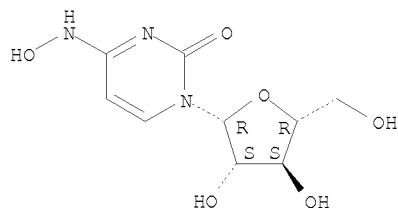
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(Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
PREP (Preparation); USES (Uses)
(preparation of modified nucleosides for treatment of viral infections and
abnormal cellular proliferation)

RN 13491-41-3 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1- β -D-arabinofuranosyl-, 4-oxime (9CI)
(CA INDEX NAME)

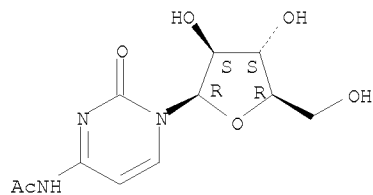
Absolute stereochemistry.



RN 13491-47-9 CAPLUS

CN Acetamide, N-(1- β -D-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)-
(CA INDEX NAME)

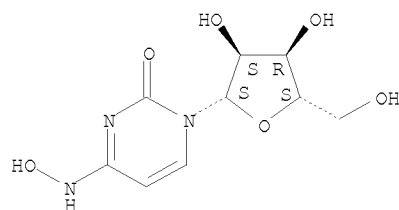
Absolute stereochemistry.



RN 402725-23-9 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1- β -L-ribofuranosyl-, 4-oxime (9CI) (CA
INDEX NAME)

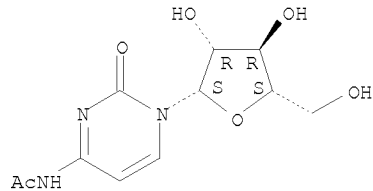
Absolute stereochemistry.



RN 415705-01-0 CAPLUS

CN Acetamide, N-(1- β -L-arabinofuranosyl-1,2-dihydro-2-oxo-4-pyrimidinyl)-
(CA INDEX NAME)

Absolute stereochemistry.



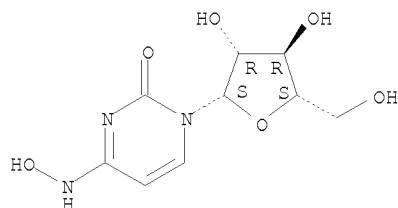
RN 415705-11-2 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1- β -L-arabinofuranosyl-, 4-oxime (9CI)
(CA INDEX NAME)

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Absolute stereochemistry.



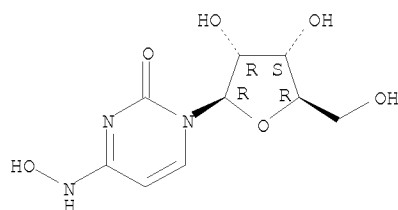
IT 3258-02-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation)

RN 3258-02-4 CAPLUS

CN Uridine, 4-oxime (CA INDEX NAME)

Absolute stereochemistry.



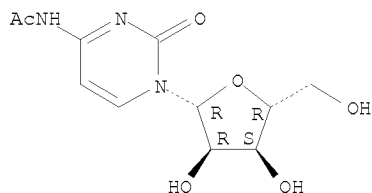
IT 3768-18-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation)

RN 3768-18-1 CAPLUS

CN Cytidine, N-acetyl- (CA INDEX NAME)

Absolute stereochemistry.



L10 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:171918 CAPLUS

DN 136:217007

TI Preparation of antiviral nucleoside derivatives as inhibitors of subgenomic hepatitis C virus RNA replication

IN Devos, Rene; Dymock, Brian William; Hobbs, Christopher John; Jiang, Wen-rong; Martin, Joseph Armstrong; Merrett, John Herbert; Najera, Isabel; Shimma, Nobuo; Tsukuda, Takuo

PA F. Hoffmann-La Roche Ag, Switz.

SO PCT Int. Appl., 225 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

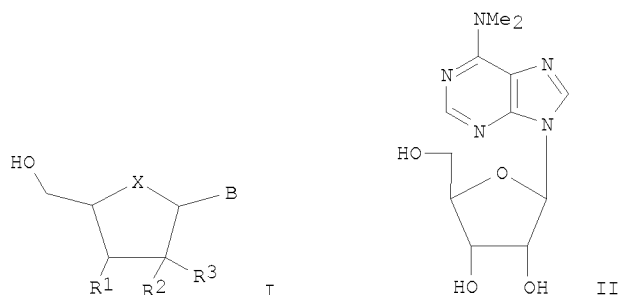
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2002018404 | A2 | 20020307 | WO 2001-EP9633 | 20010821 |
| | WO 2002018404 | A9 | 20031002 | | |

McIntosh

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|----|----------|-----------------|----------|
| US 20030008841 | A1 | 20030109 | US 2001-923620 | 20010807 |
| CA 2419399 | A1 | 20020307 | CA 2001-2419399 | 20010821 |
| AU 2001095497 | A | 20020313 | AU 2001-95497 | 20010821 |
| EP 1315736 | A2 | 20030604 | EP 2001-976128 | 20010821 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2001013611 | A | 20030624 | BR 2001-13611 | 20010821 |
| JP 2004513083 | T | 20040430 | JP 2002-523918 | 20010821 |
| ZA 2003001540 | A | 20040621 | ZA 2003-1540 | 20030225 |
| MX 2003PA01775 | A | 20030604 | MX 2003-PA1775 | 20030227 |
| US 20040110718 | A1 | 20040610 | US 2003-678804 | 20031003 |
| PRAI GB 2000-21285 | A | 20000830 | | |
| GB 2000-26611 | A | 20001031 | | |
| US 2001-923620 | B1 | 20010807 | | |
| WO 2001-EP9633 | W | 20010821 | | |
| OS MARPAT 136:217007 | | | | |
| GI | | | | |



AB Nucleosides I, wherein R1 is hydrogen, hydroxy, alkyl, hydroxyalkyl, alkoxy, halogen, cyano, isocyano or azido; R2 is hydrogen, hydroxy, alkoxy, chlorine, bromine or iodine; R3 is hydrogen; or R2 and R3 together represent =CH2; or R2 and R3 represent fluorine; X is O, S or CH2; B is a substituted purine base, were prepared as inhibitors of subgenomic hepatitis C virus (HCV) RNA replication. Thus, nucleoside II was prepared and tested for the inhibition of HCV RNA replication (EC50 = 0.6 μ M).

IT 3258-02-4P 3768-18-1P 13491-41-3P
402725-23-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

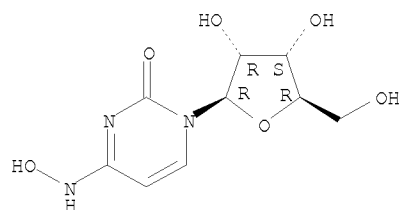
(preparation of antiviral nucleoside derivs. as inhibitors of subgenomic hepatitis C virus RNA replication)

RN 3258-02-4 CAPLUS

CN Uridine, 4-oxime (CA INDEX NAME)

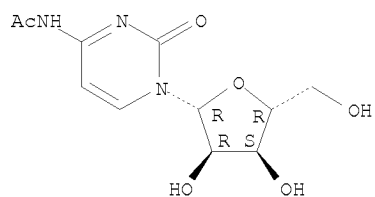
Absolute stereochemistry.

10045292



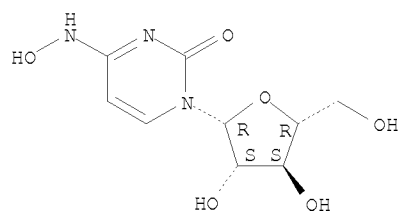
RN 3768-18-1 CAPLUS
CN Cytidine, N-acetyl- (CA INDEX NAME)

Absolute stereochemistry.



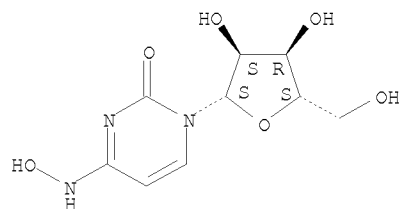
RN 13491-41-3 CAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-beta-D-arabinofuranosyl-, 4-oxime (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



RN 402725-23-9 CAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 1-beta-L-ribofuranosyl-, 4-oxime (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



=> d his

(FILE 'HOME' ENTERED AT 11:06:27 ON 30 AUG 2008)

FILE 'REGISTRY' ENTERED AT 11:07:04 ON 30 AUG 2008

L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 20 S L1
L5 2 S L2
L6 1 S L3

McIntosh

10045292

L7 7 S L2 FULL
L8 10 S L3 FULL

FILE 'CAPLUS' ENTERED AT 11:10:19 ON 30 AUG 2008

L9 270 S L7 OR L8
L10 5 S L9 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)

=> s l1 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 11:12:20 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 63708 TO ITERATE

100.0% PROCESSED 63708 ITERATIONS 666 ANSWERS
SEARCH TIME: 00.00.01

L11 666 SEA SSS FUL L1

L12 2495 L11

=> s l12 and (flavivirus or pestivirus or hcv or flaviviridae)

1791 FLAVIVIRUS
886 FLAVIVIRUSES
2079 FLAVIVIRUS
(FLAVIVIRUS OR FLAVIVIRUSES)
512 PESTIVIRUS
272 PESTIVIRUSES
608 PESTIVIRUS
(PESTIVIRUS OR PESTIVIRUSES)
14636 HCV
24 HCVS
14640 HCV
(HCV OR HCVS)
668 FLAVIVIRIDAE

L13 46 L12 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE)

=> d bib abs hitstr 1-46

L13 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2008:529326 CAPLUS

DN 148:510687

TI Method for detecting nucleotide variations in drug-resistant pathogen or
SNPs in human genes

IN Chun, Jong Yoon

PA Seegene, Inc., S. Korea

SO PCT Int. Appl., 42pp.

CODEN: PIXXD2

DT Patent

LA English

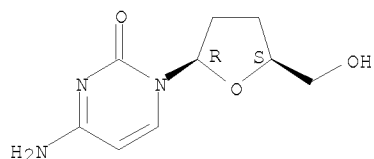
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| | ----- | --- | ----- | ----- | ----- |
| PI | WO 2008051039 | A1 | 20080502 | WO 2007-KR5291 | 20071025 |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| | RW: | | | | |
| | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

McIntosh

KR 2008037128 A 20080430 KR 2006-103745 20061025
 PRAI KR 2006-103745 A 20061025
 AB The present invention relates to methods for detecting nucleotide variations. According to the present invention, at least two nucleotide variations in the target sequence can be accurately detected without false results by a simple amplification reaction without addnl. procedure such as restriction enzyme treatment and sequencing. The method is carried out to detect a drug-resistant pathogen such as HIV-1, HIV-2, HBV (hepatitis B virus), HCV (hepatitis C virus) or human herpesvirus. Primers for detecting lamivudine resistant hepatitis B virus are provided. Multiplex PCR for the specific detection of single nucleotide polymorphism in human genes with no false-neg. and false-pos. results was also provided.
 IT 7481-89-2, Zalcitabine
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (resistant to; method for detecting nucleotide variations in drug-resistant pathogen)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



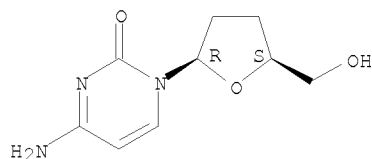
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2008:367020 CAPLUS
 DN 148:509481
 TI Liver toxicity of antiretroviral combinations including atazanavir/ritonavir in patients co-infected with HIV and hepatitis viruses: impact of pre-existing liver fibrosis
 AU Pineda, J. A.; Santos, J.; Rivero, A.; Abdel-Kader, L.; Palacios, R.; Camacho, A.; Lozano, F.; Macias, J.
 CS Unidad de Enfermedades Infecciosas, Hospital Universitario de Valme, Seville, Spain
 SO Journal of Antimicrobial Chemotherapy (2008), 61(4), 925-932
 CODEN: JACHDX; ISSN: 0305-7453
 PB Oxford University Press
 DT Journal
 LA English
 AB The aim of this study was to appraise the rate of grade 3-4 transaminase elevations (TEs) and grade 4 total bilirubin elevation (TBE) in patients co-infected with human immunodeficiency virus (HIV) and hepatitis C or hepatitis B virus (HCV or HBV, resp.) who receive atazanavir/ritonavir. Moreover, the relationship between these events and the degree of prior liver fibrosis was evaluated. A cohort of 189 HIV-infected patients, 175 co-infected with HCV, 4 with HBV and 10 with both, receiving atazanavir/ritonavir, was analyzed. Baseline liver fibrosis was assessed in 113 (60%) patients. Twenty-four patients had cirrhosis, whereas such a diagnosis was ruled out in 58 patients. Twelve (6%) and 28 (15%) patients developed grade 3-4 TEs and grade 4 TBE, resp. Eight (10%) of 84 patients with fibrosis \geq F2 vs. 1 of 29 (3%) with F0-F1 ($P = 0.51$) developed grade 3-4 TEs. The frequencies of grade 3-4 TEs in patients with and without cirrhosis were 8% and 5% ($P = 0.63$), resp. Grade 4 TBE was more common among patients with cirrhosis (35% vs. 13%, $P = 0.05$) in the univariate anal. In the multivariate study, the only predictor of grade 3-4 TEs was baseline CD4 cell count <300 cells/mm³ [adjusted OR (AOR) (95% CI) = 8.77 (1.07-71.42), $P = 0.04$]. The factors independently associated with grade 4 TBE were baseline total bilirubin >1 mg/dL [AOR (95% CI) = 3.2 (1.21-8.45), $P = 0.01$] and age >40 years [AOR (95% CI) = 2.98 (1.19-7.47), $P = 0.02$]. Prior significant liver fibrosis or cirrhosis do not increase substantially the risk of severe TE associated with atazanavir/ritonavir in patients co-infected with HIV and hepatitis viruses.

10045292

IT 7481-89-2, Zalcitabine
RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(liver toxicity of antiretroviral combinations in patients co-infected
with HIV and hepatitis viruses and impact of pre-existing liver
fibrosis)
RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:352859 CAPLUS
DN 148:394354
TI Compositions and methods for treatment of viral diseases
IN Johansen, Lisa M.; Owens, Christopher M.; Mawhinney, Christina; Chappell,
Todd W.; Brown, Alexander T.; Frank, Michael G.; Altmeyer, Ralf
PA Combinatorx (Singapore) Pre. Ltd., Singapore
SO PCT Int. Appl., 237pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2008033466 | A2 | 20080320 | WO 2007-US19932 | 20070913 |
| | W: | | | | |
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| | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | US 20080161324 | A1 | 20080703 | US 2007-900893 | 20070913 |
| PRAI | US 2006-844463P | P | 20060914 | | |
| | US 2006-874061P | P | 20061211 | | |

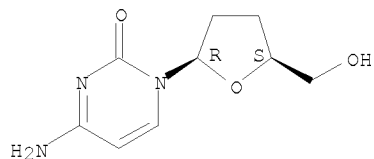
AB Based on the results of the authors screen identifying compds. and combinations of compds. having antiviral activity, the present invention features compns., methods, and kits useful in the treatment of viral diseases. In certain embodiments, the viral disease is caused by a single stranded RNA virus, a flaviviridae virus, or a hepatic virus. In particular embodiments, the viral disease is viral hepatitis (e.g., hepatitis A, hepatitis B, hepatitis C, hepatitis D, hepatitis E). Also featured are screening methods for identification of novel compds. that may be used to treat a viral disease.

IT 7481-89-2, Zalcitabine 7481-89-2D, Zalcitabine,
Phosphatidyl derivs. 121154-51-6, L-DdC
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(compns. and methods for treatment of viral diseases)
RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

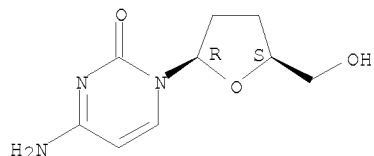
McIntosh

10045292



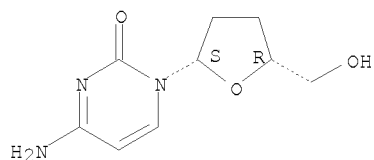
RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 121154-51-6 CAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



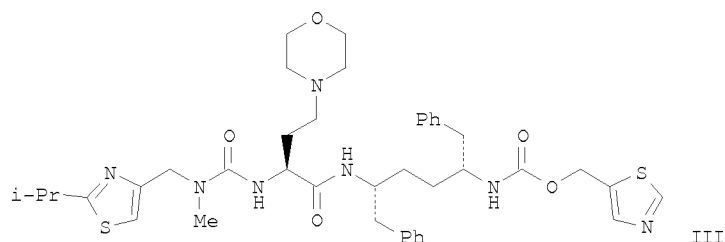
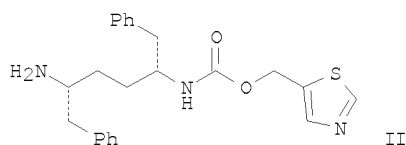
L13 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:90893 CAPLUS
DN 148:192198
TI Preparation of peptidomimetics as modulators of pharmacokinetic properties
of therapeutics by inhibiting cytochrome P450 monooxygenase
IN Desai, Manoj C.; Hong, Allen Yu; Liu, Hongtao; Xu, Lianhong; Vivian,
Randall W.
PA Gilead Sciences, Inc., USA
SO PCT Int. Appl., 346pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2008010921 | A2 | 20080124 | WO 2007-US15604 | 20070706 |
| | WO 2008010921 | A3 | 20080710 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| | US 20080108617 | A1 | 20080508 | US 2007-825605 | 20070706 |
| PRAI | US 2006-819315P | P | 20060707 | | |
| | US 2006-832371P | P | 20060721 | | |
| | US 2007-903228P | P | 20070223 | | |
| OS | MARPAT 148:192198 | | | | |

McIntosh

10045292

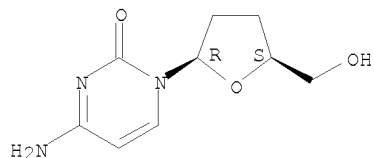
GI



AB The invention is related to the preparation of R8YZ1[CONR1(CR2R2)m]nL1NR3CH[L3A (L4Ar)p]CHR4L2CH[L3A(L4Ar)p]NR5COZ2XR9 [I; L1 = C(R6)2, CO, SO2, NHCO and derivs., OCO; R4, R6 = independently H, heteroalkyl, (un)substituted alkyl; L2 = a covalent bond, C(R6)2, CO; each L3 = independently a covalent bond, (un)substituted alkylene; each L4 = L3, O, CH2O, NH; each A = H, (un)substituted alkyl, aryl, heterocyclyl with the proviso that when A = H, p = 0; Z1, Z2 = independently O, NH and derivs.; Y, X = independently heterocyclyl, heterocyclylalkyl; each Ar = independently (un)substituted (hetero)aryl; R1, R3, R5 = independently H, (un)substituted aryl/alkyl; each R2 = independently H, (un)substituted arylhetero/hydroxy/amino/alkyl, alkylene-CO2H, alkylene-CO-alkyl, etc.; R8, R9 are each one or more H's or substituents selected from Cl, CN, (un)substituted alkyl, aryl, heterocyclyl; m = 1-2; n = 0-1; each p = independently 0-1], their pharmaceutically acceptable salts, solvates and esters, and compns. containing them which improve the pharmacokinetics of a co-administered drug which is metabolized by cytochrome P 450 monooxygenase. Thus, a multi-step synthesis using 2-isopropyl-4-[(methylamino)methyl]-1,3-thiazole, (2S)-2-amino-4-[(tert-butoxycarbonyl)amino]butanoic acid Me ester, amine II and (BrCH2CH2)2O was given for III. III inhibited CYP450 3A4 (IC50 = 80-150 nM), CYP450 2C9 (IC50 = 1,000-10,000 nM) and protease (EC50 > 20,000 nM in an anti HIV-1 cell culture assay). I alone or in combination with one or more addnl. therapeutic agents which are metabolized by cytochrome P 450 monooxygenase are useful for treating a viral infection, e.g. HIV (no data).

IT 7481-89-2, Zalcitabine
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compds. as modulators of pharmacokinetic properties of therapeutic agents)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2008 ACS on SIN
 AN 2008:42485 CAPLUS
 DN 148:121966

McIntosh

TI Preparation of proline dipeptides and analogs as inhibitors of hepatitis c virus replication
 IN Blatt, Lawrence M.; Seiwert, Scott; Beigelman, Leonid; Kercher, Timothy; Kennedy, April L.; Andrews, Steven W.
 PA Intermune, Inc., USA; Array Biopharma, Inc.
 SO PCT Int. Appl., 126pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2008005511 | A2 | 20080110 | WO 2007-US15530 | 20070605 |
| | WO 2008005511 | A3 | 20080731 | | |
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| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| | US 20080019942 | A1 | 20080124 | US 2007-773912 | 20070705 |
| PRAI | US 2006-818914P | P | 20060705 | | |
| | US 2006-819128P | P | 20060706 | | |
| OS | MARPAT 148:121966 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention is related to the preparation of title compds. I [R1, R2 = independently (un)substituted H, halo, CN, CF3, aryl, etc.; or R1 and R2 taken together form an (un)substituted cycloalkyl, (hetero)aryl; R3, R4 = H, independently (un)substituted heteroaryl/aryl/cyclo/cycloalkyl/alkyl; or CR3R4 = (un)substituted cycloalkyl; R5 = H, (un)substituted alkyl, aryl, alkoxy, carbonyl, aminoalkyl, heteroaryl, etc.; Y = CONHSO2R1a, CONHSO2NR1aR1b, COCONR1aR1b, COCO2H, CONHR1a, COOR1a, CONHCOR1a, CO2H; R1a, R1b = independently H, (un)substituted heteroaryl/aryl/cycloalkylalkyl/cyclo/alkyl, (hetero)/aryl; or NR1aR1b = (un)substituted 3-6 membered alkyl cyclic secondary amine; or NR1aR1b = heteroaryl or heterocyclic ring] and II [A = OH, NHCR3R4Y; R5a = H, (un)substituted heteroaryl/aryl/cycloalkyl/cyclo/alkyl, (hetero)/aryl], their pharmaceutical acceptable salts, prodrugs or ester, their pharmaceutical compns. and their use as inhibitors of NS3/NS4 protease and hepatitis c virus (HCV) replication for treating liver fibrosis. Thus, III, prepared by a multi-step synthesis starting from Et 4-oxopiperidine-3-carboxylate hydrochloride, inhibited NS3/NS4 protease with an IC50 value between 10 and 50 μ M.

IT 7481-89-2, 2',3'-Dideoxycytidine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

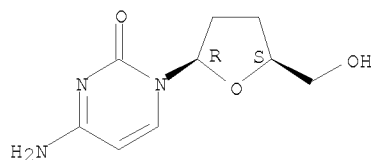
(Biological study); USES (Uses)

(novel inhibitors of hepatitis C virus replication useful in treatment of hepatitis C and associated diseases)

RN 7481-89-2 CAPLUS

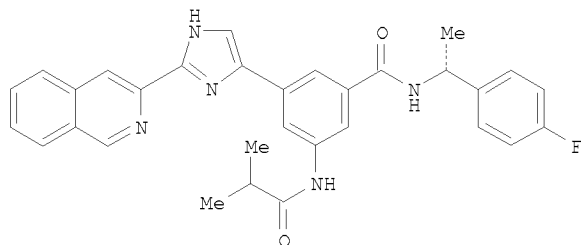
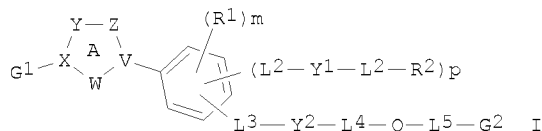
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 6 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2007:1054300 CAPLUS
 DN 147:385981
 TI Preparation of nitrogen-containing heterocycle derivatives as antiviral agents
 IN Mjalli, Adnan M. M.; Cooper, Jeremy T.; Arimilli, Murty N.; Andrews, Robert C.; Rothlein, Robert; Altel, Taleb H.
 PA USA
 SO U.S. Pat. Appl. Publ., 53pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 20070219239 | A1 | 20070920 | US 2007-704763 | 20070209 |
| | WO 2008054454 | A2 | 20080508 | WO 2007-US3580 | 20070209 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| PRAI | US 2006-772309P | P | 20060210 | | |
| OS | MARPAT 147:385981 | | | | |
| GI | | | | | |



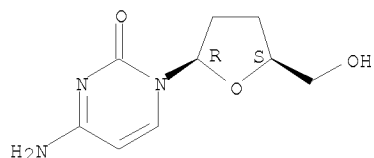
II

AB Title compds. I [R1 = CN, CF3, OCF3, NO2, cycloalkyl, etc.; R2 = halo, NH2, CO2H, OH, (cyclo)alkyl, (hetero)aryl, etc.; G1 and G2 independently = (un)substituted cycloalkyl, heterocyclyl, aryl, heteroaryl, fused arylcycloalkyl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclylaryl or fused heterocyclylheteroaryl; L1, L2 and L5 independently = direct bond, (un)substituted alkylene, alkenylene or alkynylene; L3 and L4 independently = direct bond, (un)substituted alkylene, alkenylene, alkynylene, arylene or heteroarylene; Y1 and Y2 independently = direct bond, O, C(O), S, OC(O), SO, SO2, etc.; ring A = 5-membered saturated heterocyclyl; V and X independently = C or N; W, Y or Z independently = O, S, NR5 or CR6; Q = (CR3R4)n, wherein R3-6 independently = H, (un)substituted (cyclo)alkyl, alkylene-cycloalkyl or aryl; CR3R4 = (un)substituted 5- to 7-membered (hetero)cyclyl; n = 0-1; m and p independently = 0-2], and their pharmaceutically acceptable salts,

solvates or prodrugs thereof, are prepared and disclosed as antiviral agents. Thus, e.g., II was prepared in 11 steps starting from 5-nitroisophthalic acid monomethyl ester and using [(R)-4-fluorophenethyl]amine. Exemplar compds. of the invention were found to inhibit viral replication in vaccinia viral assay with an EC50 of $\leq 100 \mu\text{M}$, e.g., II showed EC50 value of $\leq 0.5 \mu\text{M}$. As antiviral agents, I should prove useful in the treatment of viral infections and may be administered to a subject for antiviral therapy or prophylaxis.

IT 7481-89-2
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of N-containing heterocycle derivs. as antiviral agents for the treatment of viral infections)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:672664 CAPLUS

DN 147:64497

TI Diaryl urea for treating virus infections

IN Weber, Olaf; Riedl, Bernd

PA Bayer Healthcare A.-G., Germany

SO PCT Int. Appl., 90pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------|--|----------|-----------------|----------|
| PI WO 2007068380 | A1 | 20070621 | WO 2006-EP11690 | 20061206 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| PRAI EP 2005-27453 | A | 20051215 | | |
| EP 2005-27455 | A | 20051215 | | |
| EP 2005-27457 | A | 20051215 | | |
| EP 2005-27459 | A | 20051215 | | |
| EP 2005-27461 | A | 20051215 | | |
| EP 2005-27463 | A | 20051215 | | |
| EP 2005-27464 | A | 20051215 | | |
| EP 2005-27466 | A | 20051215 | | |
| EP 2005-27470 | A | 20051215 | | |
| EP 2005-27472 | A | 20051215 | | |

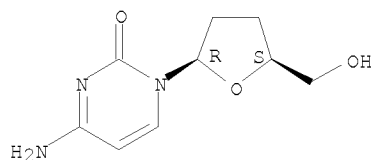
AB The present invention relates to pharmaceutical compns. for treating virus infections and/or diseases caused thereby comprising 4{4-[3-(4-chloro-3-trifluoromethylphenyl)-ureido]-3-fluorophenoxy}-pyridine-2-carboxylic acid methylamide optionally combined with at least one addnl. therapeutic agent. The addnl. therapeutic agents may include antiviral agents, corticosteroids, and/or immunomodulatory agents.

IT 7481-89-2, Zalcitabine
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (diaryl urea for treating virus infections optionally combined with

10045292

addnl. therapeutic agent)
RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



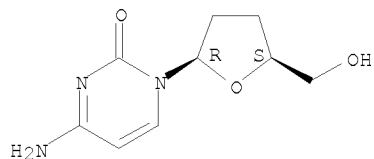
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:671929 CAPLUS
DN 147:87614
TI Diaryl ureas for treating virus infections
IN Weber, Olaf; Riedl, Bernd
PA Bayer Healthcare A.-G., Germany
SO PCT Int. Appl., 114pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--|----------|-----------------|----------|
| PI | WO 2007068383 | A1 | 20070621 | WO 2006-EP11693 | 20061206 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| PRAI | EP 2005-27451 | A | 20051215 | | |
| | EP 2005-27452 | A | 20051215 | | |
| | EP 2005-27454 | A | 20051215 | | |
| | EP 2005-27456 | A | 20051215 | | |
| | EP 2005-27458 | A | 20051215 | | |
| | EP 2005-27460 | A | 20051215 | | |
| | EP 2005-27462 | A | 20051215 | | |
| | EP 2005-27465 | A | 20051215 | | |
| | EP 2005-27467 | A | 20051215 | | |
| | EP 2005-27471 | A | 20051215 | | |
| OS | MARPAT 147:87614 | | | | |
| AB | The invention relates to pharmaceutical compns. for treating virus infections and/or diseases caused by virus infections comprising at least a diaryl urea compound optionally combined with at least one addnl. therapeutic agent. Useful combinations include e.g. BAY 43-9006 as a diaryl urea compound | | | | |
| IT | 7481-89-2, Zalcitabine | | | | |
| | RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (diaryl ureas for treatment of virus infections, and use with other agents) | | | | |
| RN | 7481-89-2 CAPLUS | | | | |
| CN | Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry. Rotation (+).

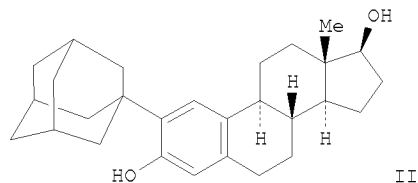
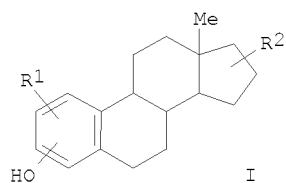
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RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:618644 CAPLUS
DN 147:31277
TI Polycyclic phenolic compounds and use in treating viral infections
IN Dugourd, Dominique
PA Migenix Corporation, Can.
SO PCT Int. Appl., 77pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2007062528 | A1 | 20070607 | WO 2006-CA1965 | 20061201 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | US 20070161611 | A1 | 20070712 | US 2006-565621 | 20061130 |
| PRAI | US 2005-742058P | P | 20051201 | | |
| | US 2006-565621 | A | 20061130 | | |
| OS | MARPAT 147:31277 | | | | |
| GI | | | | | |



AB The present invention provides antiviral polycyclic phenolic compds. (PPCs) of formula I [R1 = H, alkyl, aryl, cycloalkyl, etc.; R2 = H, OH, acyl, oxo, = (substituted) NH, SH, etc.] for use in treating or preventing viral infections and associated conditions, such as infections by Flaviviridae, Hepadnaviridae, Herpesviridae, Papillomaviridae, Retroviridae, Adenoviridae, or respiratory viruses (such as Adenoviridae, Orthomyxoviridae, Paramyxoviridae and Coronaviridae). Thus, II was prepared from estrone and 1-adamantanol, and inhibited viral release by 69% in BVDV-infected MDBK cells.

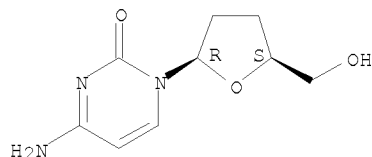
IT 7481-89-2, Zalcitabine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (co-drug; estrone derivs. for treatment of viral infections)

RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

McIntosh

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RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:485141 CAPLUS

DN 146:468577

TI Anti-mineralocorticoid therapy of infection

IN Prendergast, Patrick T.

PA Prendergast, Patrick, T., Australia

SO PCT Int. Appl., 53 pp.

CODEN: PIXXD2

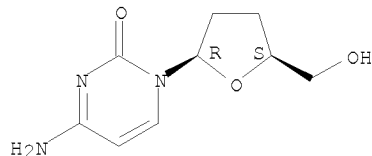
DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--------|----------|-----------------|----------|
| WO 2007049265 | A2 | 20070503 | WO 2006-IE124 | 20061031 |
| WO 2007049265 | A3 | 20080124 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| CA 2627463 | A1 | 20070503 | CA 2006-2627463 | 20061031 |
| EP 1940414 | A2 | 20080709 | EP 2006-809736 | 20061031 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS | | | | |
| PRAI IE 2005-723 | A | 20051028 | | |
| WO 2006-IE124 | W | 20061031 | | |
| OS MARPAT 146:468577 | | | | |
| AB Antimineralocorticoid compds. are disclosed for use in the prophylaxis and therapy of viral infections, especially the retroviral infection by HIV. These compds. can be administered alone or in combination with conventional anti-viral agents or anti-sense mineralocorticoid steroid receptor or DNA mutants of heat shock proteins. | | | | |
| IT 7481-89-2, Zalcitabine | | | | |
| RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (anti-mineralocorticoid therapy of infection) | | | | |
| RN 7481-89-2 | CAPLUS | | | |
| CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry. Rotation (+).



L13 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2007:150669 CAPLUS

DN 146:229612

McIntosh

TI Preparation of macrocyclic carboxylic acids, amides, and acylsulfonamides as inhibitors of HCV replication
 IN Seiwert, Scott D.; Blatt, Lawrence M.; Andrews, Steven W.; Martin, Pierre; Schumacher, Andreas; Barnett, Bradley R.; Eary, Todd C.; Kaus, Robert; Kercher, Timothy; Liu, Weidong; Lyon, Michael; Nichols, Paul; Wang, Bin; Sammakia, Tarek; Kennedy, April; Jiang, Yutong
 PA Intermune, Inc., USA; Array Biopharma Inc.
 SO PCT Int. Appl., 512pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2007015824 | A2 | 20070208 | WO 2006-US27738 | 20060717 |
| | WO 2007015824 | A3 | 20070719 | | |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| | RW: | | | | |
| | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| | AU 2006276246 | A1 | 20070208 | AU 2006-276246 | 20060717 |
| | CA 2615666 | A1 | 20070208 | CA 2006-2615666 | 20060717 |
| | EP 1924594 | A2 | 20080528 | EP 2006-800088 | 20060717 |
| | R: | | | | |
| | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS | | | | |
| | US 20070054842 | A1 | 20070308 | US 2006-491126 | 20060721 |
| | MX 200801166 | A | 20080318 | MX 2008-1166 | 20080124 |
| | IN 2008DN01510 | A | 20080620 | IN 2008-DN1510 | 20080221 |
| | KR 2008039434 | A | 20080507 | KR 2008-704379 | 20080222 |
| PRAI | US 2005-702195P | P | 20050725 | | |
| | US 2005-725533P | P | 20051011 | | |
| | US 2006-789800P | P | 20060406 | | |
| | WO 2006-US27738 | W | 20060717 | | |
| OS | CASREACT 146:229612; MARPAT 146:229612 | | | | |
| GI | | | | | |

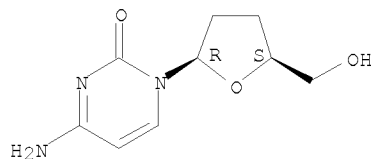
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to macrocyclic compds. I and analogs [R1 = H, OC(:O)R1; R1 = (un)substituted N-heteroaryl; R2 = OH, NHR5; R5 = Ph, alkyl, CN, cyclopropylcarbonyl, etc.; R3 = H, CH2R6, CSNH2, (un)substituted thiazol-2-yl, etc.; R6 = CF3, t-Bu, (un)substituted Ph, cyclopropyl, furanyl, etc.; R4 = H, cyclopropylmethyl; the dashed line represents an optional double bond], and their pharmaceutically acceptable salts, prodrugs, and esters for use in pharmaceutical compns. for the treatment of hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI in the presence of DCE and treatment with 1-methylcyclopropane-1-sulfonamide in the presence of DBU, showed IC50 < 0.1 μ M in the NS3-NS4 protease inhibition assay.

IT 7481-89-2, 2' 3' Dideoxycytidine
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination therapy agent; preparation of macrocyclic carboxylic acids, amides and acylsulfonamides as inhibitors of HCV replication)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

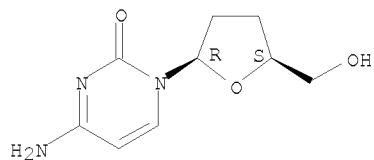
10045292



L13 ANSWER 12 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:61511 CAPLUS
DN 146:161493
TI Eliciting immune responses to escape mutants of targeted therapies
IN Apelian, David; Franzusoff, Alex; Rodell, Timothy C.
PA Globeimmune, Inc., USA
SO PCT Int. Appl., 83pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2007008780 | A2 | 20070118 | WO 2006-US26710 | 20060710 |
| WO 2007008780 | A3 | 20070322 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2006268333 | A1 | 20070118 | AU 2006-268333 | 20060710 |
| CA 2614884 | A1 | 20070118 | CA 2006-2614884 | 20060710 |
| EP 1906997 | A2 | 20080409 | EP 2006-786760 | 20060710 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| KR 2008043775 | A | 20080519 | KR 2008-703088 | 20080205 |
| PRAI US 2005-698381P | P | 20050711 | | |
| WO 2006-US26710 | W | 20060710 | | |
| AB The authors disclose yeast cells vector and drug resistant mutant polypeptides (or mimotopes) derived from tumors or viruses for use in eliciting an immune response to the mutant. | | | | |
| IT 7481-89-2, Zalcitabine | | | | |
| RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (yeast vectors for eliciting immune responses to protein mutants mediating resistance to) | | | | |
| RN 7481-89-2 CAPLUS | | | | |
| CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry. Rotation (+).



L13 ANSWER 13 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1310700 CAPLUS
DN 146:68682
TI Methods for treating viral infection with oral or injectable drug solution
IN Kim, Jong Joseph; Matharu, Rajinder
PA VGX Pharmaceuticals, Inc, USA

McIntosh

10045292

SO PCT Int. Appl., 42pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|----------|
| PI | WO 2006133194 | A2 | 20061214 | WO 2006-US21923 | 20060606 |
| | WO 2006133194 | A3 | 20070607 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |

PRAI US 2005-687813P P 20050606

AB Pharmaceutical composition comprising compds. and/or composition useful to inhibit viral replication are disclosed. The compns., suitable for oral or injectable delivery, comprise glucocorticoid receptor antagonists and optionally other antiviral agents, e.g., mifepristone, zidovudine, abacavir, 3TC, etc., and polyethylene glycol as a carrier. The compds. are used at dosage levels effective in treating and/or preventing human immunodeficiency virus (HIV), hepatitis C virus (HCV) or herpes simplex virus (HSV) infections.

IT 7481-89-2, 2',3'-Dideoxycytidine

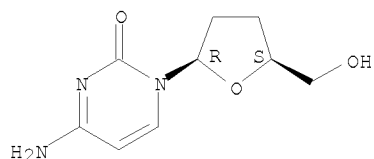
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral or injectable solns. of glucocorticoid receptor antagonists and other antiviral agents for treating and/or preventing viral infections)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 14 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:1261770 CAPLUS

DN 144:7097

TI Preparation of macrocyclic carboxylic acid derivatives as inhibitors of HCV replication

IN Blatt, Lawrence M.; Andrews, Steven W.; Condroski, Kevin R.; Doherty, George A.; Jiang, Yutong; Josey, John A.; Kennedy, April L.; Madduru, Machender R.; Stengel, Peter J.; Wenglowksy, Steven M.; Woodard, Benjamin T.; Woodard, Laura

PA USA

SO U.S. Pat. Appl. Publ., 228 pp., Cont.-in-part of U.S. Ser. No. 64,445.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|----------------|---|----------|-----------------|----------|
| PI | US 20050267018 | A1 | 20051201 | US 2005-93884 | 20050329 |
| | WO 2005037214 | A2 | 20050428 | WO 2004-US33970 | 20041013 |
| | WO 2005037214 | A3 | 20051103 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, | | | |

McIntosh

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

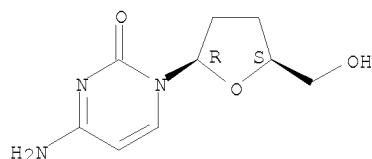
PRAI US 2003-511541P P 20031014
 US 2004-558161P P 20040330
 US 2004-562418P P 20040414
 US 2004-612381P P 20040922
 US 2004-612460P P 20040922
 WO 2004-US333970 A1 20041013
 US 2005-64445 A2 20050223
 OS MARPAT 144:7097
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to macrocyclic compds., e.g., I [Q is (un)substituted 2-isoindolinyl, 2-isoquinolinyl, 1-benzoazetidiny, 1-indolinyl, (3,4-dehydro)pyrrolidino, (3,4-dehydro)piperidino or Q is R3-R4, where R3 is alkyl, cycloalkyl, alkylcycloalkyl, Ph, pyridyl and other heterocyclic groups and R4 is H, Ph, pyridyl and other heterocyclic groups; V is O, S, NH; W is O, NR5 or CR5, where R5 is H, alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl; Y is a sulfonimide CONHSO2R6, where R6 is (un)substituted alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl, aryl, heteroaryl or (un)substituted phenyl; or Y is carboxy or a pharmaceutically-acceptable salt or prodrug; R1 is H, (un)substituted alkyl, cycloalkyl, alkylcycloalkyl, Ph or benzyl; R2 is H, alkyl, (thio)carbonyl, acyl, or sulfonyl group; the dashed line represents an optional double bond], for use in pharmaceutical compns. for the treatment of hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI and 4-fluoro-2,3-dihydro-1H-isoindole, showed IC50 and EC50 < 0.1 μ M in the NS3-NS4A protease inhibition assay and did not display toxicity in Rattus sp. when dosed for seven days at 30 mg/kg BID, providing at least a 10-fold safety margin above the presumptive efficacious dose (3 mg/kg) that yields liver concns. 100-fold in excess of the replicon EC50 value of the compound

IT 7481-89-2
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of macrocyclic carboxylic acid derivs. as inhibitors of HCV replication)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 15 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2005:1106860 CAPLUS
 DN 143:367596
 TI Preparation of macrocyclic carboxylic acids or sulfonamides as inhibitors of HCV replication
 IN Blatt, Lawrence M.; Wenglow, Steven M.; Andrews, Steven W.; Condroski, Kevin R.; Jiang, Yutong; Kennedy, April L.; Doherty, George A.; Josey, John A.; Stengel, Peter J.; Woodard, Benjamin T.; Madduru, Machender R.
 PA Intermune, Inc., USA
 SO PCT Int. Appl., 444 pp.
 CODEN: PIXXD2

10045292

DT Patent
LA English
FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|------------------|----------|
| PI | WO 2005095403 | A2 | 20051013 | WO 2005-US10494 | 20050329 |
| | WO 2005095403 | A3 | 20051201 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2005228894 | A1 | 20051013 | AU 2005-228894 | 20050329 |
| | CA 2560897 | A1 | 20051013 | CA 2005-2560897 | 20050329 |
| | EP 1749007 | A2 | 20070207 | EP 2005-757750 | 20050329 |
| | R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | |
| | CN 1938311 | A | 20070328 | CN 2005-80010503 | 20050329 |
| | BR 2005009467 | A | 20070911 | BR 2005-9467 | 20050329 |
| | JP 2007531749 | T | 20071108 | JP 2007-506466 | 20050329 |
| | MX 2006PA11268 | A | 20061129 | MX 2006-PA11268 | 20060929 |
| | NO 2006004933 | A | 20061215 | NO 2006-4933 | 20061027 |
| | IN 2006DN06333 | A | 20070831 | IN 2006-DN6333 | 20061027 |
| | KR 2007016137 | A | 20070207 | KR 2006-722763 | 20061030 |
| PRAI | US 2004-558161P | P | 20040330 | | |
| | US 2004-562418P | P | 20040414 | | |
| | US 2004-612381P | P | 20040922 | | |
| | US 2004-612460P | P | 20040922 | | |
| | WO 2005-US10494 | W | 20050329 | | |
| OS | MARPAT 143:367596 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to macrocyclic compds., e.g., I [Q is (un)substituted 2-isoindolinyl, 2-isoquinolinyl, 1-benzoazetidiny, 1-indolinyl, (3,4-dehydro)pyrrolidino, (3,4-dehydro)piperidino or Q is R3-R4, where R3 is alkyl, cycloalkyl, alkylcycloalkyl, Ph, pyridyl and other heterocyclic groups and R4 is H, Ph, pyridyl and other heterocyclic groups; V is O, S, NH; W is O, NR5 or CR5, where R5 is H, alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl; Y is a sulfonimide CONHSO2R6, where R6 is (un)substituted alkyl, fluoroalkyl, cycloalkyl, alkylcycloalkyl, aryl, heteroaryl or (un)substituted phenyl; or Y is carboxy or a pharmaceutically-acceptable salt or prodrug; R1 is H, (un)substituted alkyl, cycloalkyl, alkylcycloalkyl, Ph or benzyl; R2 is H, alkyl, (thio)carbonyl, acyl, or sulfonyl group; the dashed line represents an optional double bond], for use in pharmaceutical compns. for the treatment of flaviviral or hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI and 4-fluoro-2,3-dihydro-1H-isoindole, showed IC50 and EC50 < 0.1 µM in the NS3-NS4A protease inhibition assay and did not display toxicity in Rattus sp. when dosed for seven days at 30 mg/kg BID, providing at least a 10-fold safety margin above the presumptive efficacious dose (3 mg/kg) that yields liver concns. 100-fold in excess of the replicon EC50 value of the compound

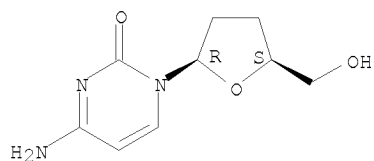
IT 7481-89-2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of macrocyclic carboxylic acids or sulfonamides as inhibitors of HCV replication)

RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

McIntosh

10045292



L13 ANSWER 16 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:371064 CAPLUS

DN 142:430532

TI Preparation of macrocyclic carboxylic acids and acylsulfonamides as inhibitors of HCV replication

IN Blatt, Lawrence M.; Wenglow, Steven Mark; Andrews, Steven Wade; Jiang, Yutong; Kennedy, April Layne; Condroski, Kevin Ronald; Josey, John Anthony; Stengel, Peter John; Madduru, Machender R.; Doherty, George Andrew; Woodard, Benjamin T.

PA Intermune, Inc., USA; Array Biopharma Inc.

SO PCT Int. Appl., 244 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--|----------|------------------|----------|
| PI | WO 2005037214 | A2 | 20050428 | WO 2004-US33970 | 20041013 |
| | WO 2005037214 | A3 | 20051103 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2004281780 | A1 | 20050428 | AU 2004-281780 | 20041013 |
| | CA 2540858 | A1 | 20050428 | CA 2004-2540858 | 20041013 |
| | EP 1680137 | A2 | 20060719 | EP 2004-795169 | 20041013 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | |
| | BR 2004015373 | A | 20061212 | BR 2004-15373 | 20041013 |
| | CN 1889970 | A | 20070103 | CN 2004-80035412 | 20041013 |
| | JP 2007533642 | T | 20071122 | JP 2006-535671 | 20041013 |
| | US 20050267018 | A1 | 20051201 | US 2005-93884 | 20050329 |
| | MX 2006PA03963 | A | 20060825 | MX 2006-PA3963 | 20060407 |
| | KR 2007033315 | A | 20070326 | KR 2006-707146 | 20060413 |
| | KR 853579 | B1 | 20080821 | | |
| | IN 2006DN02245 | A | 20070803 | IN 2006-DN2245 | 20060424 |
| | NO 2006002089 | A | 20060509 | NO 2006-2089 | 20060509 |
| PRAI | US 2003-511541P | P | 20031014 | | |
| | US 2004-612460P | P | 20040922 | | |
| | US 2004-558161P | P | 20040330 | | |
| | US 2004-562418P | P | 20040414 | | |
| | US 2004-612381P | P | 20040922 | | |
| | WO 2004-US33970 | W | 20041013 | | |
| | US 2005-64445 | A2 | 20050223 | | |
| OS | CASREACT 142:430532; MARPAT 142:430532 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to macrocyclic compds., e.g., tetrahydroisoquinolinecarboxylic acid derivs. I [R1, R2 are independently H, halo, cyano, hydroxy, alkyl, alkoxy; R5 is a carbamoyl, acyl or carboxy

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ester; Y is a sulfonimide CONHSO₂R₉, where R₉ is alkyl, cycloalkyl or (un)substituted phenyl; or Y is carboxylic acid or pharmaceutically-acceptable salt or prodrug; R₁₀, R₁₁ are independently H or alkyl or CRIOR₁₁ is cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl; W is O or NH; the dashed line represents an optional double bond], for use in pharmaceutical compns. for the treatment of hepatitis C virus (HCV) infection and liver fibrosis. Thus, compound II, prepared by reaction of the macrocyclic prolinol derivative with CDI and 4-fluoro-2,3-dihydro-1H-isoindole, showed IC₅₀ and EC₅₀ < 0.1 μ M in the NS3-NS4A protease inhibition assay and did not display toxicity in Rattus sp. when dosed for seven days at 30 mg/kg BID, providing at least a 10-fold safety margin above the presumptive efficacious dose (3 mg/kg) that yields liver concns. 100-fold in excess of the replicon EC₅₀ value of the compound

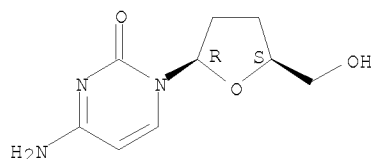
IT 7481-89-2, 2' 3' Dideoxycytidine

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of macrocyclic carboxylic acids and acylsulfonamides as inhibitors of HCV replication)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 17 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2005:185375 CAPLUS

DN 142:254563

TI Antimetabolite antiviral dosing regimen for hepatitis C virus or flaviviridae therapy

IN Stuyver, Lieven J.

PA Belg.

SO U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|------|----------|-----------------|----------|
| PI | US 20050049220 | A1 | 20050303 | US 2004-921052 | 20040818 |
| PRAI | US 2003-496202P | P | 20030818 | | |

AB An anti-hepatitis C agent which is an antimetabolite to the host and cannot be administered on a daily or chronic basis as is usual in antiviral therapy (referred to below as an "anti-HCV antimetabolite"), can be administered using a traditional anticancer dosing regimen (for example via i.v. or parenteral injection), over a period of 1-7 days followed by cessation of therapy until rebound of the viral load is noted. This dosing regimen runs counter to conventional antiviral experience, wherein effective agents are usually administered over at least fourteen days of sustained therapy, and typically on an indefinite daily basis.

IT 7481-89-2, Zalcitabine

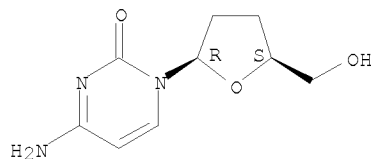
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antimetabolite antiviral dosing regimen for hepatitis C virus or flaviviridae therapy)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

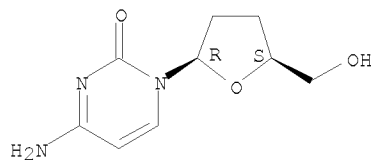
10045292



L13 ANSWER 18 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:177803 CAPLUS
DN 142:254560
TI Antimetabolite antiviral dosing regimen for hepatitis C virus or
flaviviridae therapy
IN Stuyver, Lieven J.
PA Pharmasset, Inc., USA
SO PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--|----------|-----------------|----------|
| PI | WO 2005018330 | A1 | 20050303 | WO 2004-US26686 | 20040817 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| PRAI | US 2003-496202P | P | 20030818 | | |
| AB | An anti-hepatitis C agent which is an anti-metabolite to the host and cannot be administered on a daily or chronic basis as is usual in anti-viral therapy (referred to below as an "anti-HCV anti-metabolite"), can be administered using a traditional anti-cancer dosing regimen (for example via i.v. or parenteral injection), over a period of 1-7 days followed by cessation of therapy until rebound of the viral load is noted. This dosing regimen runs counter to conventional antiviral experience, wherein effective agents are usually administered over at least fourteen days of sustained therapy, and typically on an indefinite daily basis. | | | | |
| IT | 7481-89-2, Zalcitabine RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antimetabolite antiviral dosing regimen for hepatitis C virus or flaviviridae therapy) | | | | |
| RN | 7481-89-2 CAPLUS | | | | |
| CN | Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry. Rotation (+).



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:136552 CAPLUS
DN 142:233276
TI Use of indomethacin and indomethacin derivatives as broad-spectrum

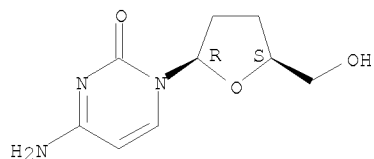
McIntosh

10045292

antiviral drugs, and corresponding pharmaceutical compositions.
IN Santoro, Maria Gabriella
PA Universita' Degli Studi di Roma 'tor Vergata', Italy
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|--|----------|-----------------|----------|
| PI | WO 2005013980 | A1 | 20050217 | WO 2004-EP51773 | 20040811 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2535448 | A1 | 20050217 | CA 2004-2535448 | 20040811 |
| | EP 1660078 | A1 | 20060531 | EP 2004-766476 | 20040811 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | |
| | US 20060229356 | A1 | 20061012 | US 2006-568071 | 20060405 |
| PRAI | IT 2003-RM394 | A | 20030812 | | |
| | WO 2004-EP51773 | W | 20040811 | | |
| AB | The invention discloses the use of indomethacin (INDO) and its derivs. and salts as antiviral drugs, since it was found that INDO is able to stimulate an antiviral defense response in cells attacked by viruses. This antiviral response has been found in the presence of INDO alone and/or in combination with other compds., for instance with metals and metal-containing compds., Prostanoids and antiviral drugs. In combination with these compds. INDO develops an unexpected as well as effective synergic antiviral action. | | | | |
| IT | 7481-89-2, DDC | RL: AGR (Agricultural use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (indomethacin and derivs. as broad-spectrum antiviral drugs, pharmaceutical compns., and combinations with other agents) | | | |
| RN | 7481-89-2 | CAPLUS | | | |
| CN | Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry. Rotation (+).



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 20 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:703121 CAPLUS
DN 141:207236
TI Preparation of 1,1-dioxido-4H-1,2,4-benzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents
IN Pratt, John K.; Betebenner, David A.; Donner, Pamela L.; Green, Brian E.; Kempf, Dale J.; McDaniel, Keith E.; Maring, Clarence J.; Stoll, Vincent S.; Zhang, Rong
PA USA
SO U.S. Pat. Appl. Publ., 278 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

McIntosh

10045292

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|------|----------|-----------------|----------|
| PI | US 20040167123 | A1 | 20040826 | US 2003-699513 | 20031031 |
| PRAI | US 2002-423209P | P | 20021101 | | |
| | US 2003-461784P | P | 20030410 | | |
| | US 2003-489448P | P | 20030723 | | |
| | US 2003-509107P | P | 20031006 | | |
| OS | MARPAT 141:207236 | | | | |
| GI | | | | | |

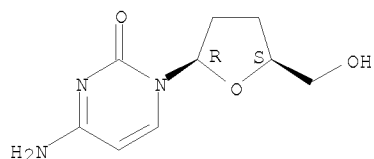
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein A = monocyclic or bicyclic ring selected from hetero/aryl, cycloalkyl, cycloalkenyl, heterocyclyl; R1 = H, (un)substituted cycloalkyl/cyclo/alkenyl, alkoxy carbonyl/alkoxy/aryl/arylsulfonyl/arylsulfanyl/carboxy/cyano/heteroaryl/alkyl, heterocyclyl, etc.; R2, R3 = independently H, cyano, halo, (un)substituted alkenyl, alkoxy carbonyl, alkyl, heteroaryl, etc.; CR2R3C = 5- or 6-membered ring selected from Ph, pyridinyl, pyrimidinyl, pyridazinyl, thienyl, furanyl, pyrazolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, triazolyl, thiadiazolyl, tetrazolyl, cyclopentyl, and cyclohexyl; R4 = OH and derivs., halo, NH2 and derivs., etc.; R5 = independently CN, NO2, (un)substituted alk(en/yn)yl, hetero/aryl, arylsulfonyl, heterocyclyl etc.; n = 0-4; their pharmaceutically acceptable salts, stereoisomers, or tautomers] were prepared as hepatitis C (HCV) polymerase inhibitors for treating related infections. Thus II was prepared by alkylation of III (preparation given) with tris(methylthio)methyl Me sulfate in AcOH, cyclization with 2-amino-4[(4-methoxymethoxy)methyl]thiophene-3-sulfonamide, deprotection, condensation with cyclopropanecarboxaldehyde, reduction with LiBH4. I inhibited HCV polymerase with IC50's in the range of 0.002 μ M to 500 μ M. I inhibited RNA replication with EC50 in the range of 0.002 μ M to > 100 μ M. I exhibited a cytopathic effect reduction with TC50's in the range of 6.6 μ M to > 100 μ M.

IT 7481-89-2, Zalcitabine
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination therapy; preparation of 1,1-dioxidobenzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents)

RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 21 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:701799 CAPLUS
 DN 141:225774
 TI Preparation of 2',3'-dideoxy and 2',3'-didehydro nucleoside analogs as prodrugs for treating viral infections, most notably HIV
 IN Cheng, Yung-chi; Tanaka, Hiromichi; Baba, Masanori
 PA USA
 SO U.S. Pat. Appl. Publ., 45 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|----------------|------|----------|-----------------|----------|
| PI | US 20040167096 | A1 | 20040826 | US 2004-781305 | 20040218 |
| | AU 2004260630 | A1 | 20050210 | AU 2004-260630 | 20040218 |
| | CA 2514466 | A1 | 20050210 | CA 2004-2514466 | 20040218 |
| | WO 2005011709 | A1 | 20050210 | WO 2004-US4713 | 20040218 |

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

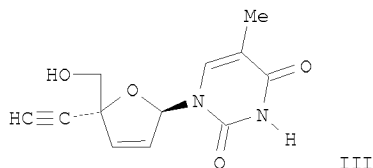
BR 2004007374 A 20060110 BR 2004-7374 20040218
 EP 1653976 A1 20060510 EP 2004-775776 20040218

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1777432 A 20060524 CN 2004-80010529 20040218
 JP 2006528972 T 20061228 JP 2006-532288 20040218
 IN 2005KN01553 A 20061027 IN 2005-KN1553 20050805
 MX 2005PA08736 A 20051005 MX 2005-PA8736 20050817
 ZA 2005006630 A 20060628 ZA 2005-6630 20050818

PRAI US 2003-448554P P 20030219
 WO 2004-US4713 W 20040218

OS CASREACT 141:225774; MARPAT 141:225774
 GI

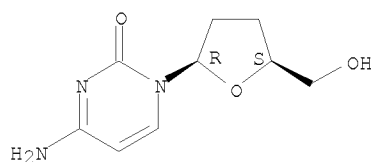


AB Nucleosides I, wherein B is nucleobase; Z is O or CH₂; R is H, OH, halo, alkyl substituents; R₁ can be H, Me, alkenyl, alkynyl; R₂ is H, acyl, alkyl, ether, phosphoethers; and 2',3'-didehydro nucleosides II where Z is O; and R₃ can alkyl, alkenyl, alkynyl, halo, hydroxy, were prepared as prodrugs and antiviral agents. Thus, the synthesized 2',3'-dideoxy and didehydro nucleoside analogs were tested as potential antiviral, anti-HIV and anti-infective prodrugs as independent agents, or in combination with other agents. Specifically, didehydro nucleoside III was prepared and tested in vitro as potent anti-HIV-1 agent (EC₅₀ = 0.25 ± 0.14) and as well less toxic (ID₅₀ >256) as D4T, therefor has the potential as a new anti-HIV drug.

IT 7481-89-2, DdC 107036-62-4 147058-39-7
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (synthesis of 2',3'-dideoxy and didehydro nucleoside analog and their evaluation as antiviral, anti-HIV and anti-infective prodrugs)

RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

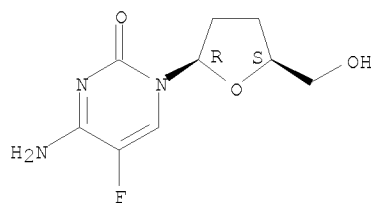
Absolute stereochemistry. Rotation (+).



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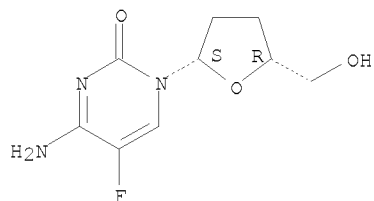
RN 107036-62-4 CAPLUS
CN Cytidine, 2',3'-dideoxy-5-fluoro- (CA INDEX NAME)

Absolute stereochemistry.



RN 147058-39-7 CAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L13 ANSWER 22 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:453332 CAPLUS
DN 141:17577
TI Concurrent inhibiting viral replication and treating cancer by pegylated arginine deiminase, and methods for determining the sensitivity to arginine deprivation therapy
IN Clark, Mike A.
PA Phoenix Pharmacologics, Inc., USA
SO PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2004046309 | A2 | 20040603 | WO 2003-US30770 | 20030929 |
| | WO 2004046309 | A3 | 20050804 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2506244 | A1 | 20040603 | CA 2003-2506244 | 20030929 |
| | AU 2003282883 | A1 | 20040615 | AU 2003-282883 | 20030929 |
| | US 20040131604 | A1 | 20040708 | US 2003-674666 | 20030929 |
| | US 7204980 | B2 | 20070417 | | |
| | EP 1599217 | A2 | 20051130 | EP 2003-774504 | 20030929 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| | JP 2006515281 | T | 20060525 | JP 2004-553429 | 20030929 |
| | CN 1809378 | A | 20060726 | CN 2003-825264 | 20030929 |
| | US 20070172469 | A1 | 20070726 | US 2007-689166 | 20070321 |
| PRAI | US 2002-427497P | P | 20021118 | | |
| | US 2003-674666 | A1 | 20030929 | | |

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WO 2003-US30770 W 20030929

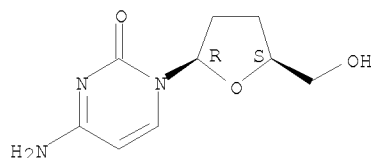
AB The present invention is directed to methods of modulating viral replication comprising administering to a patient arginine deiminase (ADI) bonded to polyethylene glycol (PEG). The present invention is also directed to methods of concurrently modulating viral replication and treating cancer, including, for example, sarcomas, hepatomas and melanomas. The present invention is also directed to methods of determining the susceptibility of an individual to arginine deprivation therapy for a viral infection, methods for improving liver function, and the like.

IT 7481-89-2, Zalcitabine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dideoxycytosine, co-treatment with; concurrent inhibiting viral replication and treating cancer by pegylated arginine deiminase, and methods for determining sensitivity to arginine deprivation therapy)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 23 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:412943 CAPLUS

DN 140:423711

TI Preparation of 1,1-dioxido-4H-1,2,4-benzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents

IN Pratt, John K.; Betebenner, David A.; Donner, Pamela L.; Green, Brian E.; Kempf, Dale J.; McDaniel, Keith F.; Maring, Clarence J.; Stoll, Vincent S.; Zhang, Rong

PA Abbott Laboratories, USA

SO PCT Int. Appl., 514 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 4

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|--|----------|-----------------|----------|
| PI | WO 2004041818 | A1 | 20040521 | WO 2003-US34707 | 20031031 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 20040097492 | A1 | 20040520 | US 2002-285714 | 20021101 |
| | US 20040087577 | A1 | 20040506 | US 2003-410853 | 20030410 |
| | US 20040162285 | A1 | 20040819 | US 2003-625121 | 20030723 |
| | US 20050075331 | A1 | 20050407 | US 2003-679881 | 20031006 |
| | CA 2504385 | A1 | 20040521 | CA 2003-2504385 | 20031031 |
| | AU 2003291670 | A1 | 20040607 | AU 2003-291670 | 20031031 |
| | EP 1560827 | A1 | 20050810 | EP 2003-768559 | 20031031 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| | JP 2006509042 | T | 20060316 | JP 2005-502238 | 20031031 |
| | BR 2003015897 | A | 20080513 | BR 2003-15897 | 20031031 |
| | MX 2005PA04670 | A | 20050818 | MX 2005-PA4670 | 20050429 |
| | IN 2005MN00522 | A | 20050930 | IN 2005-MN522 | 20050531 |
| PRAI | US 2002-285714 | A | 20021101 | | |
| | US 2003-410853 | A | 20030410 | | |
| | US 2003-625121 | A | 20030723 | | |
| | US 2003-679881 | A | 20031006 | | |

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WO 2003-US34707 W 20031031
OS MARPAT 140:423711
GI

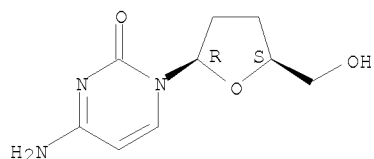
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein A = monocyclic or bicyclic ring selected from hetero/aryl, cycloalkyl, cycloalkenyl, heterocyclyl; R1 = H, (un)substituted cycloalkyl/cyclo/alkenyl, alkoxy carbonyl/alkoxy/aryl/arylsulfonyl/arylsulfanyl/carboxy/cyano/heteroaryl/alkyl, heterocyclyl, etc.; R2, R3 = independently H, cyano, halo, (un)substituted alkenyl, alkoxy carbonyl, alkyl, heteroaryl, etc.; CR2R3C = 5- or 6-membered ring selected from Ph, pyridinyl, pyrimidinyl, pyridazinyl, thienyl, furanyl, pyrazolyl, oxazolyl, thiazolyl, imidazolyl, isoxazolyl, isothiazolyl, triazolyl, thiadiazolyl, tetrazolyl, cyclopentyl, and cyclohexyl; R4 = OH and derivs., halo, NH2 and derivs., etc.; R5 = independently CN, NO2, (un)substituted alk(en/yn)yl, hetero/aryl, arylsulfonyl, heterocyclyl etc.; n = 0-4; their pharmaceutically acceptable salts, stereoisomers, or tautomers] were prepared as hepatitis C (HCV) polymerase inhibitors for treating related infections. Thus II was prepared by alkylation of III (preparation given) with tris(methylthio)methyl Me sulfate in AcOH, cyclization with 2-amino-4[(4-methoxymethoxy)methyl]thiophene-3-sulfonamide, deprotection, condensation with cyclopropanecarboxaldehyde, reduction with LiBH4. I inhibited HCV polymerase with IC50's in the range of 0.002 μ M to 500 μ M. I inhibited RNA replication with EC50 in the range of 0.002 μ M to > 100 μ M. I exhibited a cytopathic effect reduction with TC50's in the range of 6.6 μ M to > 100 μ M.

IT 7481-89-2, Zalcitabine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination therapy; preparation of 1,1-dioxidobenzothiadiazines as hepatitis C polymerase inhibitors and anti-infective agents)

RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



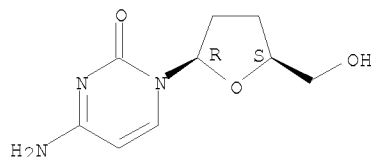
L13 ANSWER 24 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:332156 CAPLUS
DN 140:399402
TI Depletion of mitochondrial DNA in liver under antiretroviral therapy with didanosine, stavudine, or zalcitabine
AU Walker, Ulrich A.; Baeuerle, Jochen; Laguno, Montse; Murillas, Javier; Mauss, Stefan; Schmutz, Gunther; Setzer, Bernhard; Miquel, Rosa; Gatell, Jose M.; Mallolas, Josep
CS Department of Clinical Immunology, Medizinische Universitaetsklinik, Freiburg, Germany
SO Hepatology (Hoboken, NJ, United States) (2004), 39(2), 311-317
CODEN: HPTLDD; ISSN: 0270-9139
PB John Wiley & Sons, Inc.
DT Journal
LA English
AB The "D drug" HIV reverse-transcriptase inhibitors zalcitabine, didanosine, and stavudine are relatively strong inhibitors of polymerase-gamma compared with the "non-D drugs" zidovudine, lamivudine, and abacavir. D drugs deplete mitochondrial DNA (mtDNA) in cultured hepatocytes. This mtDNA depletion is associated with an increased in vitro production of lactate. To investigate the origin of hyperlactatemia in HIV-infected patients and the effects of antiretroviral therapy on liver mtDNA, we biopsied liver tissue from 94 individuals with chronic hepatitis C virus (HCV) infection. Eighty subjects were coinfectd with HIV. Serum lactate was

McIntosh

measured at the time of biopsy. Hepatic mtDNA and liver histol. were centrally assessed. Liver mtDNA content of HIV-infected patients receiving D drugs at the time of biopsy (n = 34) was decreased by 47% (P<.0001) compared with those without D drugs (n = 35). Aside from a possible association between HCV genotype 1 status and mtDNA depletion in multivariate anal., there were no other virol., immunol., histol., demog. or treatment-related variables that could explain the mtDNA depletion. Lactate was above the upper limit of normal in only three patients, all of whom were treated with D drugs. The mtDNA in each of them was lower than in any non-D drug patient and significantly (P = .017) depleted compared with D drug patients with normal lactate. In conclusion, D drug treatment is associated with decreased hepatic mtDNA in HIV-infected patients with chronic HCV infection. Moderate mtDNA depletion in liver does not necessarily lead to hyperlactatemia, but more pronounced decreases in hepatic mtDNA may be an important contributor to lactate elevation.

IT 7481-89-2, Zalcitabine
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (depletion of mitochondrial DNA in liver under antiretroviral therapy with didanosine, stavudine, or zalcitabine)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:120958 CAPLUS
 DN 140:157421
 TI 2',3'-dideoxynucleoside analogs for the treatment or prevention of
 flaviviridae infections
 IN Shi, Junxing; Schinazi, Raymond F.; Striker, Robert
 PA Pharmasset Ltd., Barbados; Emory University; Board of Trustees of the
 Leland Stanford Junior University
 SO PCT Int. Appl., 86 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|--|-----------------|----------|
| PI | WO 2004013298 | A2 | 20040212 | WO 2003-US24288 | 20030801 |
| | WO 2004013298 | A3 | 20040401 | | |
| | W: | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | |
| | RW: | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | |
| | AU 2003263978 | A1 | 20040223 | AU 2003-263978 | 20030801 |
| | US 20040067877 | A1 | 20040408 | US 2003-632875 | 20030801 |
| PRAI | US 2002-453715P | P | 20020801 | | |
| | US 2002-453716P | P | 20020801 | | |
| | WO 2003-US24288 | W | 20030801 | | |
| OS | MARPAT 140:157421 | | | | |
| AB | A method for the treatment or prevention of flaviviridae infections, in particular, hepatitis C virus infection, in a host, and in | | | | |

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particular, a human, is provided that includes administering an effective amount of a 2',3'-dideoxynucleoside or a pharmaceutically acceptable salt or prodrug thereof, optionally in a pharmaceutically acceptable diluent or excipient. Preparation of compds. of the invention is included.

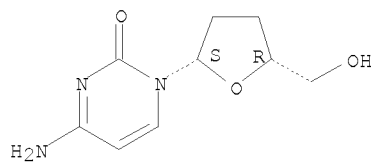
IT 121154-51-6P 147058-39-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(dideoxynucleoside analog preparation for treatment or prevention of flaviviridae infections)

RN 121154-51-6 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

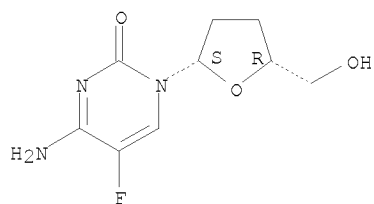
Absolute stereochemistry. Rotation (-).



RN 147058-39-7 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 107036-57-7 121154-51-6D, derivs. 147058-39-7D

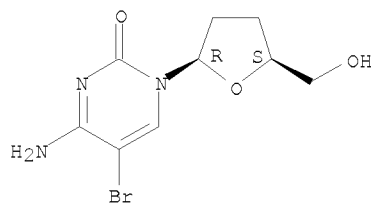
, derivs. 160963-15-5 160963-16-6 161170-31-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dideoxynucleoside analog preparation for treatment or prevention of flaviviridae infections)

RN 107036-57-7 CAPLUS

CN Cytidine, 5-bromo-2',3'-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



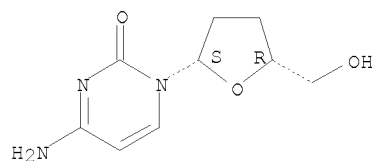
RN 121154-51-6 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

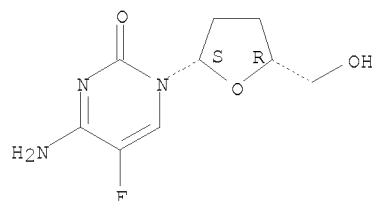
McIntosh

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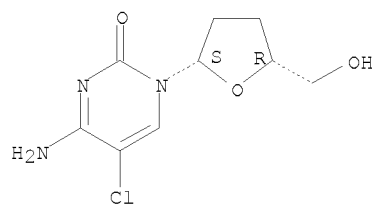
RN 147058-39-7 CAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



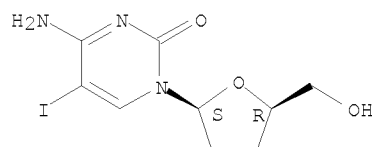
RN 160963-15-5 CAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-5-chloro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



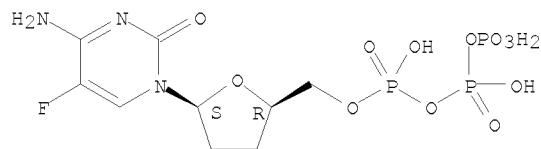
RN 160963-16-6 CAPLUS
CN 2(1H)-Pyrimidinone, 4-amino-5-iodo-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 161170-31-6 CAPLUS
CN Triphosphoric acid, P-[(2R,5S)-[5-(4-amino-5-fluoro-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 128112-71-0P 189818-67-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

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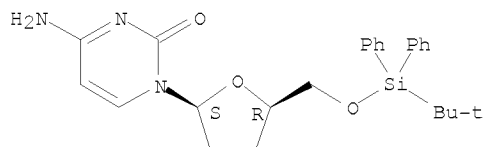
(Reactant or reagent)

(dideoxynucleoside analog preparation for treatment or prevention of
flaviviridae infections)

RN 128112-71-0 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-5-[[[(1,1-
dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]- (CA INDEX
NAME)

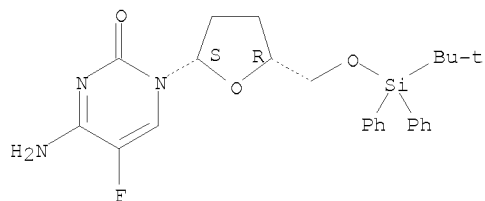
Absolute stereochemistry.



RN 189818-67-5 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-5-[[[(1,1-
dimethylethyl)diphenylsilyl]oxy]methyl]tetrahydro-2-furanyl]-5-fluoro-
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 656799-00-7P 656799-01-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(dideoxynucleoside analog preparation for treatment or prevention of
flaviviridae infections)

RN 656799-00-7 CAPLUS

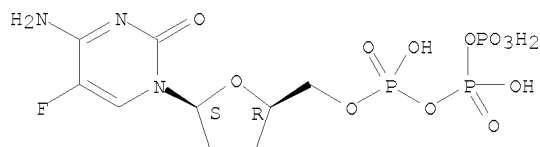
CN Triphosphoric acid, P-[[[(2R,5S)-5-(4-amino-5-fluoro-2-oxo-1(2H)-
pyrimidinyl)tetrahydro-2-furanyl]methyl] ester, compd. with
N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

CRN 161170-31-6

CMF C9 H15 F N3 O12 P3

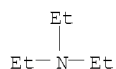
Absolute stereochemistry.



CM 2

CRN 121-44-8

CMF C6 H15 N



RN 656799-01-8 CAPLUS

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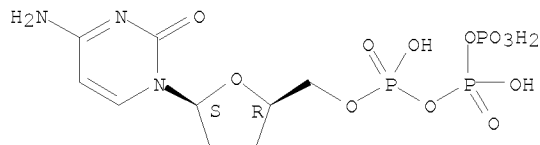
10045292

CN Triphosphoric acid, P-[[[(2R,5S)-5-(4-amino-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl)methyl] ester, compd. with N,N-diethylethanamine (9CI) (CA INDEX NAME)

CM 1

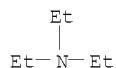
CRN 161170-30-5
CMF C9 H16 N3 O12 P3

Absolute stereochemistry.



CM 2

CRN 121-44-8
CMF C6 H15 N



L13 ANSWER 26 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:60253 CAPLUS
DN 140:127195
TI Antibodies specifically bind to anionic phospholipids and/or aminophospholipids conjugated with duramycin peptide for treating viral infections and cancer
IN Thorpe, Philip E.; Soares, Melina M.; Huang, Xianming; He, Jin; Ran, Sophia
PA Board of Regents the University of Texas System, USA
SO PCI Int. Appl., 378 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 17

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2004006847 | A2 | 20040122 | WO 2003-US21925 | 20030715 |
| | WO 2004006847 | A3 | 20050407 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2491310 | A1 | 20040122 | CA 2003-2491310 | 20030715 |
| | AU 2003247869 | A1 | 20040202 | AU 2003-247869 | 20030715 |
| | US 20040175378 | A1 | 20040909 | US 2003-620850 | 20030715 |
| | EP 1537146 | A2 | 20050608 | EP 2003-764600 | 20030715 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| | CN 1668644 | A | 20050914 | CN 2003-816751 | 20030715 |
| | JP 2005537267 | T | 20051208 | JP 2004-521771 | 20030715 |
| | BR 2003012692 | A | 20070626 | BR 2003-12692 | 20030715 |
| | MX 2005PA00652 | A | 20050819 | MX 2005-PA652 | 20050114 |
| | IN 2008DN00130 | A | 20080620 | IN 2008-DN130 | 20080104 |
| PRAI | US 2002-396263P | P | 20020715 | | |
| | WO 2003-US21925 | W | 20030715 | | |

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IN 2005-DN416 A3 20050203

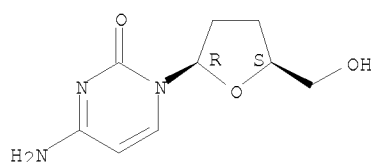
AB Disclosed are surprising discoveries concerning the role of anionic phospholipids and aminophospholipids in tumor vasculature and in viral entry and spread, and compns. and methods for utilizing these findings in the treatment of cancer and viral infections. Also disclosed are advantageous antibody, immunoconjugate and duramycin-based compns. and combinations that bind and inhibit anionic phospholipids and aminophospholipids, for use in the safe and effective treatment of cancer, viral infections and related diseases.

IT 7481-89-2D, Zalcitabine, conjugates
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antibodies specifically bind to anionic phospholipids and/or aminophospholipids conjugated with duramycin peptide for treating viral infections and cancer)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 27 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:920253 CAPLUS

DN 140:350071

TI Effect of antiretroviral therapy on liver-related mortality in patients with HIV and hepatitis C virus coinfection

AU Qurishi, Nazifa; Kreuzberg, Christina; Luechters, Guido; Effenberger, Wolfgang; Kupfer, Bernd; Sauerbruch, Tilman; Rockstroh, Juergen K.; Spengler, Ulrich

CS Department of Internal Medicine, University of Bonn, Bonn, D-53105, Germany

SO Lancet (2003), 362(9397), 1708-1713
 CODEN: LANCAO; ISSN: 0140-6736

PB Elsevier Science Ltd.

DT Journal

LA English

AB Highly active antiretroviral therapy (HAART) has improved the prognosis of HIV infection. However, replication of hepatitis C virus (HCV) is not inhibited by HAART, and treatment-related hepatotoxicity is common. To clarify the effect of HAART in HIV/HCV-coinfected patients, we studied liver-related mortality and overall mortality in 285 patients who were regularly treated during the period 1990-2002 at our department. Survival was analyzed retrospectively by Kaplan-Meier and Cox's regression analyses after patients (81% hemophiliacs) had been stratified into three groups according to their antiretroviral therapy (HAART n=93, available after 1995; treatment exclusively with nucleoside analogs n=55, available after 1992; or no treatment, n=137). Liver-related mortality rates were 0.45, 0.69, and 1.70 per 100 person-years in the HAART, antiretroviral-treatment, and untreated groups. Kaplan-Meier anal. of liver-related mortality confirmed the significant survival benefit in patients with antiretroviral therapy, and regression anal. identified HAART (odds ratio 0.106 [95% CI 0.020-0.564]), antiretroviral treatment (0.283 [0.103-0.780]), CD4-pos. T-cell count (0.746 [0.641-0.868] per 0.05+109 cells/L), serum cholinesterase (0.962 [0.938-0.986] per 100 U/L), and age (1.065 [1.027-1.105] per yr) as independent predictors of liver-related survival. Severe drug-related hepatotoxicity was seen in five patients treated with nucleoside analogs alone and 13 treated with HAART. No patient died from drug-related hepatotoxicity. In addition to improved overall survival, antiretroviral therapy significantly reduced long-term liver-related mortality in our patients. This survival benefit seems to outweigh by far the associated risks of severe hepatotoxicity.

IT 7481-89-2, Zalcitabine
 RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

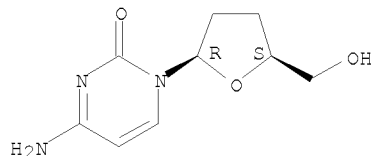
10045292

(antiretroviral therapy effect on liver-related mortality in patients
with HIV and hepatitis C virus coinfection)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 28 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:772804 CAPLUS

DN 140:296896

TI Risk of severe hepatotoxicity associated with antiretroviral therapy in
the HIV-NAT Cohort, Thailand, 1996-2001

AU Law, W. Phillip; Dore, Gregory J.; Duncombe, Chris J.; Mahanontharit,
Apicha; Boyd, Mark A.; Ruxrungtham, Kiat; Lange, Joep M.; Phanuphak,
Prapchan; Cooper, David A.

CS National Centre in HIV Epidemiology and Clinical Research, University of
New South Wales, Sydney, 2010, Australia

SO AIDS (London, United Kingdom) (2003), 17(15), 2191-2199

CODEN: AIDSET; ISSN: 0269-9370

PB Lippincott Williams & Wilkins

DT Journal

LA English

AB The aim was to examine rates and predictors of severe hepatotoxicity with
combination antiretroviral therapy in a developing country setting: the
eight HIV-NAT randomized controlled trials in Thailand. All patients (n =
692) received at least two nucleoside reverse transcriptase inhibitors;
215 also received a non-nucleoside reverse transcriptase inhibitor (NNRTI)
and 135 also received a protease inhibitor. Severe hepatotoxicity was
defined as an increase in alanine aminotransferase (ALT) level to five
times the upper limit of normal and an increase of at least 100 U/l from
baseline. Liver function tests were available at baseline and weeks 4, 8,
12, 24, 36 and 48. Hepatitis B virus (HBV) and hepatitis C virus (HCV)
testing was performed on stored serum. Mean age was 32.3 yr;
52% were male, 11% had Centers for Disease Control and Prevention category
C HIV disease at baseline, and 22% had received prior antiretroviral
therapy. Prevalence of HBV, HCV and HBV/HCV
coinfection was 8.7%, 7.2%, and 0.4%, resp. Incidence of severe
hepatotoxicity was 6.1/100 person-years [95% confidence interval (CI),
4.3-8.3/100]. In multivariate anal., predictors of severe hepatotoxicity
were HBV or HCV coinfection, and NNRTI-containing therapy.
Incidence of severe hepatotoxicity was particularly high among patients
receiving nevirapine (18.5/100 person-years; 95% CI, 11.6-27.8) and
nevirapine/efavirenz (44.4/100 person-years; 95% CI, 12.1-113.7).
Incidence and risk factors for severe hepatotoxicity appear similar among
these Thai patients to those in other racial groups. Development of
standardized antiretroviral therapy regimens for developing country
settings should consider potential toxicity and capabilities for
monitoring of toxicity.

IT 7481-89-2, Zalcitabine

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(risk of severe hepatotoxicity associated with antiretroviral therapy in
HIV-infected patients)

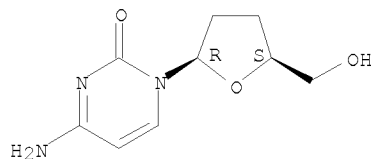
RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

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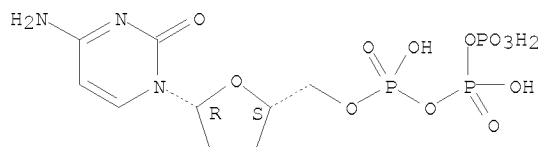
10045292



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:411733 CAPLUS
DN 139:374222
TI Canonical 3'-deoxyribonucleotides as a chain terminator for HCV
NS5B RNA-dependent RNA polymerase
AU Shim, Jaehoon; Larson, Gabry; Lai, Vicky; Naim, Suhaila; Wu, Jim Zhen
CS Drug discovery, Ribapharm Corporation, Costa Mesa, CA, 92626, USA
SO Antiviral Research (2003), 58(3), 243-251
CODEN: ARSRDR; ISSN: 0166-3542
PB Elsevier Science B.V.
DT Journal
LA English
AB Nucleoside chain terminators represent one of the most promising classes of antiviral drug for DNA viruses and retroviral infection; however, they have not been fully explored against RNA viral polymerases. In this report, we investigate the notion of employing canonical 3'-deoxyribonucleoside triphosphates (3'-dNTPs) as a chain terminator for hepatitis C virus (HCV) NS5B RNA-dependent RNA polymerase (RdRp). Using a HCV RNA transcript-dependent RNA elongating assay, we found that they inhibit NS5B RdRp with K_i ranged from 0.7 to 23 μM . Addnl. structure-activity relation studies showed that removal of 2'-hydroxyl group, elimination of ribose's 2',3'-carbon-carbon bond, or addition of 5-Me group to a pyrimidine base is detrimental to 3'-dNTP's potency. Direct evidence was obtained that all four canonical 3'-dNTP are incorporated into elongating RNA chains and the incorporation terminates NS5B RdRp-catalyzed RNA synthesis. The K_i values for each of 3'-dNTPs were determined in the single nucleotide incorporation expts. The nucleoside form of 3'-dNTPs was further evaluated in a cell culture-based HCV subgenomic replicon assay. The discrepancy between the potent in vitro activity and the weak cellular activity of these chain terminators was discussed in the context of nucleoside metabolism. This proof of concept study demonstrates that canonical 3'-dNTPs can function as an effective chain terminator for HCV NS5B RdRp with cytidine as the preferred nucleoside scaffold. Our results further sheds light on the potential hurdles that need to be overcome for successful development of active nucleoside chain terminators in vivo for a viral RNA polymerase, especially the HCV NS5B RdRp.
IT 66004-77-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(canonical 3'-deoxyribonucleotides as a chain terminator for HCV NS5B RNA-dependent RNA polymerase)
RN 66004-77-1 CAPLUS
CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 30 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:347498 CAPLUS
DN 139:47738

McIntosh

10045292

TI Performance characteristics of the TRUGENE HIV-1 genotyping kit and the OpenGene DNA sequencing system

AU Kuritzkes, Daniel R.; Grant, Robert M.; Feorino, Paul; Griswold, Marshal; Hoover, Marie; Young, Russell; Day, Stephen; Lloyd, Robert M., Jr.; Reid, Caroline; Morgan, Gillian F.; Winslow, Dean L.

CS Division of Infectious Diseases, University of Colorado Health Sciences Center, Denver, CO, USA

SO Journal of Clinical Microbiology (2003), 41(4), 1594-1599
CODEN: JCMIDW; ISSN: 0095-1137

PB American Society for Microbiology

DT Journal

LA English

AB The TRUGENE HIV-1 Genotyping Kit and OpenGene DNA Sequencing System are designed to sequence the protease (PR)- and reverse transcriptase (RT)-coding regions of human immunodeficiency virus type 1 (HIV-1) pol. Studies were undertaken to determine the accuracy of this assay system in detecting resistance-associated mutations and to determine the effects of RNA extraction methods, anticoagulants, specimen handling, and potentially interfering substances. Samples were plasma obtained from HIV-infected subjects or seroneg. plasma to which viruses derived from wild-type and mutant infectious mol. clones (IMC) of HIV-1 were added. Extraction methods tested included standard and UltraSensitive AMPLICOR HIV-1 MONITOR, QIAGEN viral RNA extraction mini kit, and QIAGEN Ultra HIV extraction kit, and NASBA manual HIV-1 quant. NucliSens. Sequence data from test sites were compared to a "gold standard" reference sequence to determine the percent agreement. Comparisons between test and reference sequences at the nucleotide level showed 97.5 to 100% agreement. Similar results were obtained regardless of extraction method, regardless of use of EDTA or acid citrate dextrose as anticoagulant, and despite the presence of triglycerides, bilirubin, Hb, antiretroviral drugs, HIV-2, hepatitis C virus (HCV), HBV, cytomegalovirus, human T-cell leukemia virus type 1 (HTLV-1), or HTLV-2. Samples with HIV-1 RNA titers of $\geq 1,000$ copies/mL gave consistent results. The TRUGENE HIV-1 Genotyping Kit and OpenGene DNA Sequencing System consistently generate highly accurate sequence data when tested with IMC-derived HIV and patient samples.

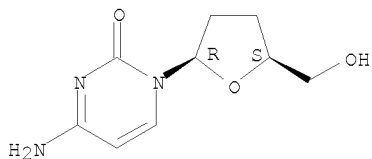
IT 7481-89-2, Zalcitabine

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(potentially interfering substances have no impact on performance characteristics of TRUGENE HIV-1 genotyping kit and OpenGene DNA sequencing system)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 31 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2003:222146 CAPLUS

DN 138:253701

TI Fusion proteins comprising transduction and cytotoxic domains for treating pathogenic infection

IN Dowdy, Steven F.

PA Washington University, USA

SO U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Provisional Ser. No. 82,402.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

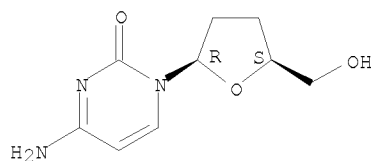
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|----------------|------|----------|-----------------|----------|
| PI | US 20030054000 | A1 | 20030320 | US 2001-775052 | 20010201 |

McIntosh

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US 6645501 B2 20031111
US 6221355 B1 20010424 US 1998-208966 19981210
PRAI US 1997-69012P P 19971210
US 1998-82402P P 19980420
AB The present invention provides an anti-pathogen system comprising one or more fusion proteins that includes a transduction domain and a cytotoxic domain. The cytotoxic domain is specifically activated by a pathogen infection. The anti-pathogen system effectively kills or injures cells infected by one or a combination of different pathogens. Further provided are protein transduction domains that provide enhanced transduction efficiency. The pathogen includes cytomegalovirus, herpes simplex virus, hepatitis C virus, yellow fever virus, flavivirus, rhinovirus, HIV-1, HIV-2, HTLV-III, LAV, Plasmodium falciparum, Plasmodium vivax, Plasmodium ovale, Plasmodium malariae, etc.
IT 7481-89-2, DdC
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fusion proteins comprising transduction and cytotoxic domains for treating viral, retroviral and plasmodial infections)
RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 32 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:927626 CAPLUS
DN 138:20431
TI Use of mitochondrial DNA-specific quantitative real-time PCR for diagnosis and monitoring drug toxicity in humans suffering with various disorders such as viral infections, neurological disorders, cancer, arthritis, male sterility or organ failure
IN Cote, Helene; Montaner, Julio; O'Shaughnessy, Michael V.
PA The University of British Columbia, Can.
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|--|----------|-----------------|----------|
| WO 2002097124 | A1 | 20021205 | WO 2002-CA796 | 20020529 |
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AB The invention discloses the use of quant. real-time polymerase chain reaction (PCR) to monitor drug toxicity, which involves measuring the relative amount of mitochondrial DNA in peripheral blood cells obtained from individuals suffering with various disorders. The invention relates that the quant. real-time PCR involves co-amplification of a mitochondrial sequence and a reference sequence, such as a genomic sequence. The invention also discloses that said disorders include HIV infection, cancer, hepatitis A, hepatitis B, hepatitis C, arthritis, Alzheimer's disease, Parkinson's disease, or Huntington's disease. The invention also relates that said drugs used to treat patients include nucleoside or nucleotide analogs, and/or reverse transcriptase inhibitors. The invention further discloses that the said method can be used to diagnose conditions such as male infertility and organ failure. The method was illustrated by detecting the amount of mitochondrial gene CCOI and the nuclear gene ASPOLy in HIV infected individuals undergoing antiviral therapy.

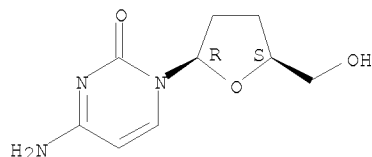
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RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mitochondrial DNA-specific quant. real-time PCR for monitoring drug toxicity in individuals suffering for various disorders such as viral infections, neurol. disorders, cancer, and arthritis)

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CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L13 ANSWER 33 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

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TI Preparation of enzymic ribonucleic acid peptide conjugates as antitumor and antiviral agents and compositions for cellular delivery

IN Beigelman, Leonid; Matulic-Adamic, Jasenka; Vargeese, Chandra; Karpeisky, Alexander; Blatt, Lawrence; Shaffer, Christopher

PA Ribozyme Pharmaceuticals, Inc, USA

SO PCT Int. Appl., 220 pp.

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DT Patent

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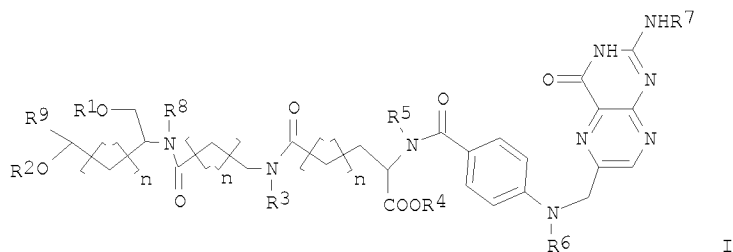
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| US 2004-944611 | A2 | 20040916 |
| US 2004-962898 | A2 | 20041012 |
| US 2004-624231P | P | 20041102 |
| US 2005-31668 | A1 | 20050106 |
| US 2005-39680 | A2 | 20050118 |
| WO 2005-US4270 | A2 | 20050209 |
| US 2005-652787P | P | 20050214 |
| US 2005-63415 | B1 | 20050222 |
| US 2005-98303 | A2 | 20050404 |
| US 2005-678531P | P | 20050506 |

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| | | |
|-----------------|----|----------|
| US 2005-703946P | P | 20050729 |
| US 2005-205646 | A2 | 20050817 |
| US 2005-217936 | A1 | 20050901 |
| US 2005-234730 | A2 | 20050923 |
| US 2005-737024P | P | 20051115 |
| US 2005-299254 | A2 | 20051208 |
| US 2006-353630 | A2 | 20060214 |
| US 2006-369108 | A2 | 20060306 |
| WO 2006-US32168 | A2 | 20060817 |
| WO 2006-US34553 | A2 | 20060901 |
| WO 2006-US34845 | A1 | 20060905 |

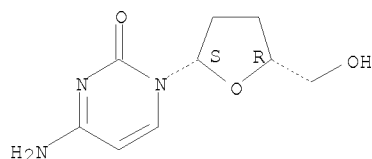
GI



AB This invention features peptide nucleotide conjugates I wherein each R1-R8 are independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, or a protecting group, each "n" is independently an integer from 0 to about 200, R9 is a straight or branched chain alkyl, substituted alkyl, aryl, or substituted aryl, and R2 is a phosphorus containing group, nucleoside, nucleotide, small mol., nucleic acid, or a solid support comprising a linker., degradable linkers, compns., methods of synthesis, and applications thereof, including folate, galactose, galactosamine, N-acetyl galactosamine, PEG, phospholipid, peptide and human serum albumin (HAS) derived conjugates of biol. active compds., including antibodies, antivirals, chemotherapeutics, peptides, proteins, hormones nucleosides, nucleotides, non-nucleosides, and nucleic acids including enzymic nucleic acids, DNAzymes, allozymes, antisense, dsRNA, siRNA, triplex oligonucleotides, 2,5-A chimeras, decoys and aptamers. Thus, 1-O-(4-monomethoxytrityl)-N-(12'-hydroxydodecanoyl-2-acetamido-3,4,6-tri-O-acetyl-2-deoxy-3-D-galactopyranose)-D-threoninol 3-O-(2-cyanoethyl,N,N-diisopropylphosphoramidite) was prepared and incorporated into RNA. A method of treating a cancer patient, comprising contacting cells of patient wherein said cancer is breast cancer, lung cancer, colorectal cancer, brain cancer, esophageal cancer, stomach cancer, bladder cancer, pancreatic cancer, cervical cancer, head and neck cancer, ovarian cancer, melanoma, lymphoma, glioma, or multidrug resistant cancers and/or viral infections including HIV, HBV, HCV, CMV, RSV, HSV, poliovirus, influenza, rhinovirus, west nile virus, Ebola virus, foot and mouth virus, and papilloma.

IT 121154-51-6 147058-39-7
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of enzymic RNA peptide conjugates as antitumor and antiviral agents and compns. for cellular delivery)
 RN 121154-51-6 CAPLUS
 CN 2(1H)-Pyrimidinone, 4-amino-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



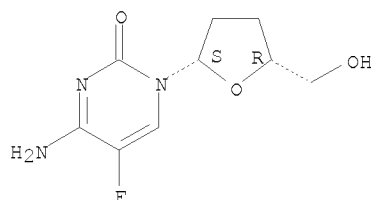
RN 147058-39-7 CAPLUS

McIntosh

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CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L13 ANSWER 34 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:869219 CAPLUS

DN 137:363028

TI Drug screening assays and kits for discovery of anti-microbial and chemotherapeutics agents

IN McCarthy, Lawrence; Kong, Lilly; Shao, Tang; Su, Xin

PA Focus Technologies, Inc., USA

SO PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2002090993 | A2 | 20021114 | WO 2001-US44783 | 20011127 |
| | WO 2002090993 | A3 | 20040415 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2430201 | A1 | 20021114 | CA 2001-2430201 | 20011127 |
| | AU 2001297821 | A1 | 20021118 | AU 2001-297821 | 20011127 |
| | US 20030039957 | A1 | 20030227 | US 2001-996187 | 20011127 |
| | EP 1435000 | A2 | 20040707 | EP 2001-273944 | 20011127 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| | JP 2005500022 | T | 20050106 | JP 2002-588199 | 20011127 |
| PRAI | US 2000-253150P | P | 20001127 | | |
| | US 2001-304533P | P | 20010709 | | |
| | US 2001-297686P | P | 20010712 | | |
| | US 2001-996187 | A2 | 20011127 | | |
| | WO 2001-US44783 | W | 20011127 | | |

AB Methods and compns. for detecting the phenotype of a bioactive mol. assays. More specifically, are provided methods and compns. are provided for determining the suitability of one ore more candidate compds. prior to or during the course of chemotherapy or anti-infective therapy, for their capacity to inhibit the bioactive mols. of micro-organisms, cancers and as an assay for expression in transgene therapy. Also provided are phenotypic assays for drug discovery. Claimed sequences were not present at the time of publication.

IT 7481-89-2, Zalcitabine

RL: BSU (Biological study, unclassified); BIOL (Biological study) (drug screening assays for discovery of anti-microbial and chemotherapeutics agents)

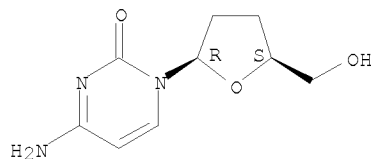
RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

McIntosh

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L13 ANSWER 35 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:832613 CAPLUS

DN 137:333119

TI 3-Aminopyridine-2-carboxyaldehyde thiosemicarbazones and methods using them for treating viral and fungal infections

IN King, Ivan C.; Doyle, Terrence W.; Sznol, Mario; Sartorelli, Alan C.; Cheng, Yung-Chi

PA Vion Pharmaceuticals, Inc., USA; Yale University

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

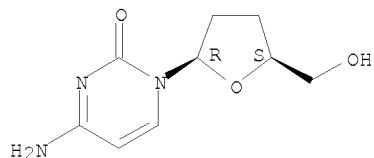
DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--|----------|-----------------|----------|
| PI | WO 2002085358 | A2 | 20021031 | WO 2002-US12358 | 20020418 |
| | WO 2002085358 | A3 | 20021219 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 2002256283 | A1 | 20021105 | AU 2002-256283 | 20020418 |
| | US 20020188011 | A1 | 20021212 | US 2002-126050 | 20020418 |
| | US 6911460 | B2 | 20050628 | | |
| | CN 1503669 | A | 20040609 | CN 2002-808591 | 20020418 |
| | US 20050261251 | A1 | 20051124 | US 2005-93648 | 20050330 |
| PRAI | US 2001-285559P | P | 20010420 | | |
| | US 2002-126050 | A3 | 20020418 | | |
| | WO 2002-US12358 | W | 20020418 | | |
| OS | MARPAT 137:333119 | | | | |
| AB | The invention provides methods for treating viral or fungal infections using 3-aminopyridine-2-carboxyaldehyde thiosemicarbazone (3-AP) and 3-amino-4-methylpyridine-2-carboxaldehyde thiosemicarbazone (3-AMP), and prodrug forms thereof, as well as pharmaceutical compns. comprising these compds. Preparation of compds. of the invention is described. | | | | |
| IT | 7481-89-2, 2',3'-Dideoxycytidine 147058-39-7 | | | | |
| | RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) | | | | |
| | (aminopyridinecarboxyaldehyde thiosemicarbazones for treatment of viral and fungal infections) | | | | |
| RN | 7481-89-2 CAPLUS | | | | |
| CN | Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry. Rotation (+).



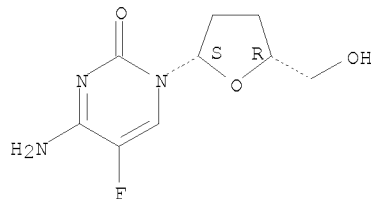
RN 147058-39-7 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-5-fluoro-1-[(2S,5R)-tetrahydro-5-(hydroxymethyl)-2-furanyl]- (CA INDEX NAME)

McIntosh

10045292

Absolute stereochemistry. Rotation (-).

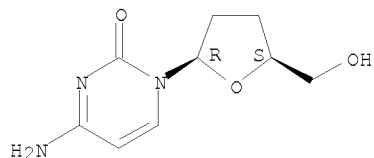


L13 ANSWER 36 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:521462 CAPLUS
DN 137:88442
TI Incensole and furanogermacrene and compounds in treatment for inhibiting
neoplastic lesions and microorganisms
IN Shanahan-Pendergast, Elisabeth
PA Ire.
SO PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|--|----------|-----------------|----------|
| PI | WO 2002053138 | A2 | 20020711 | WO 2002-IE1 | 20020102 |
| | WO 2002053138 | A3 | 20020919 | | |
| | W: | AE, AG, AT, AU, BB, BG, CA, CH, CN, CO, CU, CZ, LU, LV, MA, MD, UA, UG, US, VN, YU, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SL, SZ, UG, AT, BE, CH, CY, DE, ES, FI, ML, MR, NE, SN, TD, TG | | | |
| | AU 2002219472 | A1 | 20020716 | AU 2002-219472 | 20020102 |
| | EP 1351678 | A2 | 20031015 | EP 2002-727007 | 20020102 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| | US 20040092583 | A1 | 20040513 | US 2004-250535 | 20040102 |
| PRAI | IE 2001-2 | A | 20010102 | | |
| | WO 2002-IE1 | W | 20020102 | | |

OS MARPAT 137:88442
AB The invention discloses the use of incensole and/or furanogermacrene, derivs. metabolites and precursors thereof in the treatment of neoplasia, particularly resistant neoplasia and immunodysregulatory disorders. These compds. can be administered alone or in combination with conventional chemotherapeutic, antiviral, antiparasite agents, radiation and/or surgery. Incensole and furanogermacrene and their mixture showed antitumor activity against various human carcinomas and melanomas and antimicrobial activity against Staphylococcus aureus and Enterococcus faecalis.
IT 7481-89-2, DdC
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pharmaceutical formulation further containing; incensole and furanogermacrene and compds. as antitumor and antimicrobial agents)
RN 7481-89-2 CAPLUS
CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

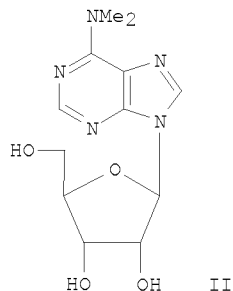
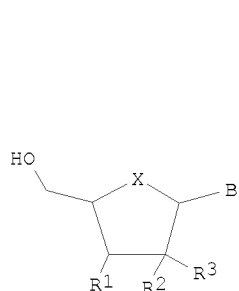


L13 ANSWER 37 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:171918 CAPLUS
DN 136:217007

McIntosh

TI Preparation of antiviral nucleoside derivatives as inhibitors of
subgenomic hepatitis C virus RNA replication
IN Devos, Rene; Dymock, Brian William; Hobbs, Christopher John; Jiang,
Wen-rong; Martin, Joseph Armstrong; Merrett, John Herbert; Najera, Isabel;
Shimma, Nobuo; Tsukuda, Takuo
PA F. Hoffmann-La Roche Ag, Switz.
SO PCT Int. Appl., 225 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------|--|----------|-----------------|----------|
| PI | WO 2002018404 | A2 | 20020307 | WO 2001-EP9633 | 20010821 |
| | WO 2002018404 | A9 | 20031002 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | US 20030008841 | A1 | 20030109 | US 2001-923620 | 20010807 |
| | CA 2419399 | A1 | 20020307 | CA 2001-2419399 | 20010821 |
| | AU 2001095497 | A | 20020313 | AU 2001-95497 | 20010821 |
| | EP 1315736 | A2 | 20030604 | EP 2001-976128 | 20010821 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| | BR 2001013611 | A | 20030624 | BR 2001-13611 | 20010821 |
| | JP 2004513083 | T | 20040430 | JP 2002-523918 | 20010821 |
| | ZA 2003001540 | A | 20040621 | ZA 2003-1540 | 20030225 |
| | MX 2003PA01775 | A | 20030604 | MX 2003-PA1775 | 20030227 |
| | US 20040110718 | A1 | 20040610 | US 2003-678804 | 20031003 |
| PRAI | GB 2000-21285 | A | 20000830 | | |
| | GB 2000-26611 | A | 20001031 | | |
| | US 2001-923620 | B1 | 20010807 | | |
| | WO 2001-EP9633 | W | 20010821 | | |
| OS | MARPAT 136:217007 | | | | |
| GI | | | | | |



AB Nucleosides I, wherein R1 is hydrogen, hydroxy, alkyl, hydroxyalkyl, alkoxy, halogen, cyano, isocyano or azido; R2 is hydrogen, hydroxy, alkoxy, chlorine, bromine or iodine; R3 is hydrogen; or R2 and R3 together represent =CH2; or R2 and R3 represent fluorine; X is O, S or CH2; B is a substituted purine base, were prepared as inhibitors of subgenomic hepatitis C virus (HCV) RNA replication. Thus, nucleoside II was prepared and tested for the inhibition of HCV RNA replication (EC50 = 0.6 μ M).

IT 7481-89-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

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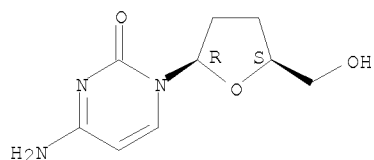
(Uses)

(preparation of antiviral nucleoside derivs. as inhibitors of subgenomic hepatitis C virus RNA replication)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L13 ANSWER 38 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2002:109650 CAPLUS

DN 136:288583

TI Effects of HAART on hepatitis C, hepatitis G, and TT virus in multiply coinfecting HIV-positive patients with haemophilia

AU Takamatsu, J.; Toyoda, H.; Fukuda, Y.; Nakano, I.; Yokozaki, S.; Hayashi, K.; Saito, H.

CS Department of Transfusion Medicine, Nagoya University School of Medicine, Nagoya, 466-8550, Japan

SO Haemophilia (2001), 7(6), 575-581

CODEN: HAEMF4; ISSN: 1351-8216

PB Blackwell Science Ltd.

DT Journal

LA English

AB In multiply coinfecting human immunodeficiency virus (HIV)-pos. patients, we investigated the effects of high-activity antiretroviral therapy (HAART) using HIV protease inhibitors on three other viruses: hepatitis C virus (HCV), hepatitis G virus (HGV), and TT virus (TTV). Viral concns. were measured serially by polymerase chain reaction methods in five patients with quadruple infection (HIV, HCV, HGV, and TTV) and in two patients with triple infection (HIV, HCV, and HGV) before and during HAART. In addition, CD4+ cell counts and serum alanine aminotransferase (ALT) levels were measured serially. Generally we observed no difference in serum HCV RNA, HGV RNA, or TTV DNA concns. between samples obtained before and after initiation of HAART, whereas HIV RNA concentration decreased and CD4 counts increased in most patients. However, two patients had markedly decreased concns. of HCV RNA and HGV RNA, resp., more than 12 mo after beginning HAART. Normalization of serum ALT levels was observed in a patient with decline of HCV RNA concns. No interactions were observed among these four viruses. HAART had no apparent direct effects on HCV, HGV, or TTV. Further studies will be required to elucidate whether the restoration of immune status through suppression of HIV replication by HAART may affect HCV or HGV RNA concns.

IT 7481-89-2, Zalcitabine

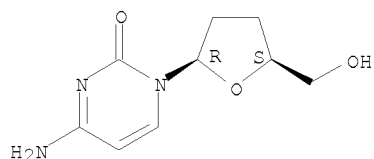
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(HAART effect on hepatitis C, hepatitis G, and TT virus in HIV-pos. patients with multiple coinfections and haemophilia)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

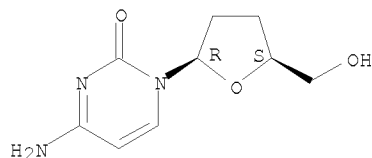
McIntosh

10045292

L13 ANSWER 39 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:107667 CAPLUS
DN 136:145568
TI Improved tolerance to anti-viral and anti-tumor chemotherapy by
administration of erythropoietin
IN Itri, Loretta; Bowers, Peter
PA Ortho-McNeil Pharmaceutical, Inc., USA
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|--|----------|-----------------|----------|
| PI | WO 2002010743 | A1 | 20020207 | WO 2001-US24426 | 20010801 |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2417550 | A1 | 20020207 | CA 2001-2417550 | 20010801 |
| | US 20020052317 | A1 | 20020502 | US 2001-921516 | 20010801 |
| | EP 1325324 | A1 | 20030709 | EP 2001-959497 | 20010801 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| | HU 2003003056 | A2 | 20031229 | HU 2003-3056 | 20010801 |
| | JP 2004505114 | T | 20040219 | JP 2002-516619 | 20010801 |
| | BR 2001013179 | A | 20040622 | BR 2001-13179 | 20010801 |
| | IN 2003KN00128 | A | 20050311 | IN 2003-KN128 | 20030131 |
| | MX 2003PA01039 | A | 20040910 | MX 2003-PA1039 | 20030203 |
| | ZA 2003001634 | A | 20040622 | ZA 2003-1634 | 20030227 |
| PRAI | US 2000-222538P | P | 20000802 | | |
| | WO 2001-US24426 | W | 20010801 | | |
| AB | The present invention provides methods using erythropoietin to improve the tolerance of anti-viral and anti-tumor chemotherapeutic regimens containing interferon. The invention also described improved methods to treat chronic HCV by adjusting the dose of ribavirin to tailor the active dose of the drug while supporting the Hb levels in the patient with EPO. The present invention also provides anti-viral dosing regimens, particularly for chronic HCV comprising administration of an interferon containing anti-viral medicament, EPO, and a compound that reduces the amount of active tumor necrosis factor in the subject. | | | | |
| IT | 7481-89-2, Zalcitabine RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (improved tolerance to anti-viral and anti-tumor chemotherapy by administration of erythropoietin) | | | | |
| RN | 7481-89-2 CAPLUS | | | | |
| CN | Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry. Rotation (+).



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 40 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2001:808478 CAPLUS
DN 136:114686
TI Hepatitis C Virus NS3 NTPase/Helicase: Different Stereoselectivity in

McIntosh

Nucleoside Triphosphate Utilisation Suggests that NTPase and Helicase Activities are Coupled by a Nucleotide-dependent Rate Limiting Step

AU Locatelli, Giada A.; Gosselin, Gilles; Spadari, Silvio; Maga, Giovanni
 CS Istituto di Genetica Biochimica ed Evoluzionistica IGBE-CNR, Pavia, Italy
 SO Journal of Molecular Biology (2001), 313(4), 683-694
 CODEN: JMOBAK; ISSN: 0022-2836

PB Academic Press

DT Journal

LA English

AB Hepatitis C virus (HCV) NS3 protein is a multifunctional enzyme, possessing protease, NTPase and helicase activities within a single polypeptide of 625 amino acid residues. These activities are essential for the virus life cycle and are considered attractive targets for anti-HCV chemotherapy. Beside ATP, the NS3 protein has the ability to utilize deoxynucleoside triphosphates (dNTPs) as the energy source for nucleic acid unwinding. We have performed an extensive anal. of the substrate specificities of both NS3 NTPase and helicase activities with respect to all four dNTPs as well as with dideoxynucleoside triphosphate (ddNTP) analogs, including both D-(β) and L-(β)-deoxy and dideoxy-nucleoside triphosphates. Our results show that almost all dNTPs and ddNTPs tested were able to inhibit hydrolysis of ATP by the NTPase activity, albeit with different efficiencies. Moreover, this activity showed almost no stereoselectivity, being able to recognize both D-(β), L-(β)-deoxy and ddNTPs. On the contrary, the helicase activity had more strict substrate selectivity, since, among D-(β)-nucleotides, only ddTTP and its analog 2',3'-dideoxy-thymidine triphosphate could be used as substrates with an efficiency comparable to ATP, whereas among L-(β)-nucleotides, only L-(β)-dATP was utilized. Comparison of the steady-state kinetic parameters for both reactions, suggested that dATP, L-(β)-dCTP and L-(β)-dTTP, specifically reduced a rate limiting step present in the helicase, but not in the NTPase, reaction pathway. These results suggest that NS3-associated NTPase and helicase activities have different sensitivities towards different classes of deoxy and dideoxy-nucleoside analogs, depending on a specific step in the reaction, as well as show different enantioselectivity for the D-(β) and L-(β)-conformations of the sugar ring. These observations provide an essential mechanistic background for the development of specific nucleotide analogs targeting either activity as potential anti-HCV agents. (c)
 2001 Academic Press.

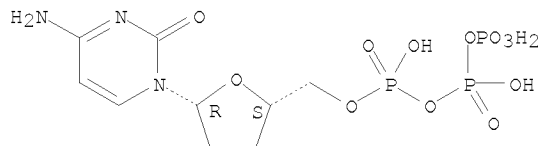
IT 66004-77-1, DdCTP 161170-30-5

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (stereoselectivity of hepatitis C virus NS3 NTPase/helicase suggests
 NTPase and helicase activities are coupled by nucleotide-dependent rate
 limiting step)

RN 66004-77-1 CAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (CA INDEX NAME)

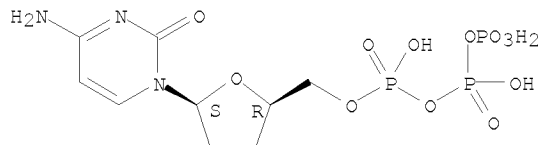
Absolute stereochemistry.



RN 161170-30-5 CAPLUS

CN Triphosphoric acid, P-[[[(2R,5S)-5-(4-amino-2-oxo-1(2H)-pyrimidinyl)tetrahydro-2-furanyl]methyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

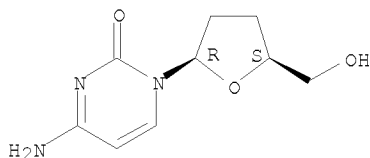


RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 41 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2001:784185 CAPLUS
 DN 136:95621
 TI Low frequency of severe hepatotoxicity and association with HCV coinfection in HIV-positive patients treated with HAART
 AU Monforte, Antonell d'Arminio; Bugarini, Roberto; Pezzotti, Patrizio; De Luca, Andrea; Antinori, Andrea; Mussini, Cristina; Vigevani, Gian Marco; Tirelli, Umberto; Bruno, Raffaele; Gritti, Francesco; Piazza, Marcello; Chigiotti, Silvia; Chirianni, Antonio; De Stefano, Carlo; Pizzigallo, Eligio; Perrella, Oreste; Moroni, Mauro
 CS ICONA Study Group, Institute of Infectious and Tropical Diseases, L Sacco H, University of Milan, Milan, 20157, Italy
 SO JAIDS, Journal of Acquired Immune Deficiency Syndromes (2001), 28(2), 114-123
 CODEN: JJASFJ
 PB Lippincott Williams & Wilkins
 DT Journal
 LA English
 AB Highly active antiretroviral therapy (HAART) is strongly effective in reducing morbidity and mortality in HIV-1-pos. individuals. Its main drawback is the potential toxicity. Data on the frequency and determinants of severe hepatotoxicity in a clin. setting are still sparse. This is a prospective study of HIV-1-pos. individuals with known HBsAg and HCV-Ab serol. The study end point was progression to alanine aminotransferase (ALT) levels ≥ 200 IU/L after HAART initiation. Cumulative probability of progression to this end point was estimated by the Kaplan-Meier method. Crude and adjusted hazard ratios (HR) were estimated by proportional hazards regression model. One thousand two hundred fifty-five patients were included. HBsAg was found in 91 (7.2%), HCV-Ab in 578 (46.5%) patients; almost all injection drug users (451 of 482; 93.6%) were HCV-Ab pos. Sixty-one individuals progressed to the end point with a probability of 7.9% (95% confidence interval [CI], 5.6-10.0) of progression at 24 mo from starting. Independent factors predicting progression to the end point were baseline ALT levels (HR, 5.29; 95% CI, 3.24-8.65; every 10 IU/L higher), HCV-Ab positivity (HR, 4.01; 95% CI, 1.48-10.85) or both HBsAg and HCV-Ab positivity (HR, 3.85, 95% CI, 1.01-14.61), and previous non-HAART therapy (HR, 1.84, 95% CI, 1.04-3.42). Patients receiving stavudine-containing regimens had a lower risk than those receiving zidovudine-containing regimens (HR, 0.30, 95% CI, 0.12-0.71). There was a low risk of ALT ≥ 200 IU/L in the authors' cohort. Hepatitis C coinfection and elevated ALT levels at HAART initiation are important predictors of progression to ALT ≥ 200 IU/L; stavudine-containing regimens were associated with a lower risk compared with zidovudine-containing regimens.
 IT 7481-89-2, Zalcitabine
 RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (low frequency of severe hepatotoxicity and association with HCV coinfection in HIV-pos. humans treated with HAART)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 42 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2000:867640 CAPLUS
 DN 135:40476
 TI The hepatitis C virus NS5B RNA-dependent RNA polymerase activity and

susceptibility to inhibitors is modulated by metal cations

AU Alaoui-Ismaili, Moulay Hicham; Hamel, Martine; L'Heureux, Lucille; Nicolas, Olivier; Bilimoria, Darius; Labonte, Patrick; Mounir, Samir; Rando, Robert F.

CS BioChem Pharma Inc., Laval, QC, H7V 4A7, Can.

SO Journal of Human Virology (2000), 3(6), 306-316
CODEN: JHVIFC; ISSN: 1090-9508

PB Lippincott Williams & Wilkins

DT Journal

LA English

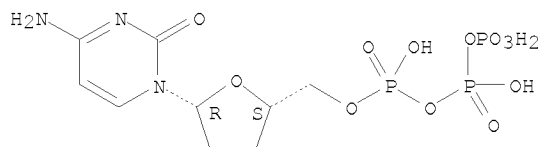
AB Objectives: The aim of this study was to understand the effect of metal cations on the hepatitis C virus (HCV) NS5B in vitro RNA-dependent RNA polymerase (RdRp) activity and its susceptibility to various inhibitors. Methods: A recombinant full-length HCV NS5B protein was expressed in insect cells and purified to homogeneity. RdRp activity was assessed using standard filtration or polyacrylamide gel-based assays. Results: Efficient inhibition of the HCV NS5B RdRp activity by gliotoxin, as well as by various substrate analogs, occurs in the presence of Mn²⁺, but not of Mg²⁺. Assays performed in the presence of both cofactors suggest that, in vitro, the enzyme's affinity for Mn²⁺ is higher than that for Mg²⁺. In addition, the RdRp activity, displayed in the presence of heteropolymeric templates, is significantly increased when the metal cofactor consists of Mn²⁺. Finally, steady state kinetics showed that the velocity of the reaction, as well as the affinity of the enzyme for its substrate, could both be affected by the nature of the divalent metal cation used.

IT 66004-77-1, 2'-3' Dideoxycytidine triphosphate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(hepatitis C virus NS5B RNA-dependent RNA polymerase activity and susceptibility to inhibitors is modulated by metal cations in vitro)

RN 66004-77-1 CAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 43 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2000:840382 CAPLUS

DN 135:40464

TI Safety and efficacy of interferon-ribavirin combination therapy in HCV-HIV coinfectd subjects: An early report

AU Zylberberg, H.; Benhamou, Y.; Lagneaux, J. L.; Landau, A.; Chaix, M. -L.; Fontaine, H.; Bochet, M.; Poynard, T.; Katlama, C.; Pialoux, G.; Brechot, C.; Pol, S.

CS Unite d'Hepatologie, INSERM U370, Unite d'Hepatologie, INSERM U370, CHU Necker, Paris, Fr.

SO Gut (2000), 47(5), 694-697
CODEN: GUTTAK; ISSN: 0017-5749

PB BMJ Publishing Group

DT Journal

LA English

AB More severe liver disease together with a poor response rate to α interferon argue for the use of more potent anti-hepatitis C virus (HCV) therapies in human immunodeficiency virus (HIV)-HCV coinfectd patients, but the efficacy and safety of interferon-ribavirin combination therapy in HIV infected subjects are unknown. Aim of this study was to retrospectively evaluate the efficacy and safety of anti-HCV combination therapy in 21 HCV-HIV coinfectd patients receiving antiretroviral therapy, and to access the clin. relevance of in vitro inhibition of phosphorylation by ribavirin of potent inhibitors of HIV-i.e., zidovudine, stavudine, and zalcitabine. Twenty one patients were treated with combined antiretroviral therapy including

zidovudine (n=8) or stavudine (n=13) (in association with protease inhibitors in 12). All received ribavirin (1000 or 1200 mg/day) and α interferon (3 MU three times/wk) for chronic hepatitis C infection. All patients had not responded (n=20) or relapsed (n=1) after a previous six month course of α interferon therapy. HIV viral load (Monitor test) and CD4 cells count were measured at the beginning and every three months during and after ribavirin plus α interferon therapy over a mean period of 11 (1) months. Clin. and biol. adverse effects were recorded. There was no significant variation in HIV viral load or CD4 cell counts after three or six months of ribavirin therapy compared with baseline values. Of the 21 subjects, three (14%) had an increase in HIV viral load of more than 0.5 log leading to discontinuation of ribavirin in one. Eleven of 21 (52.4%) and initial neg. HCV viremia at three (n=10) or six (n=1) months but only six were polymerase chain reaction neg. at the end of therapy, leading to rates for primary response and breakthrough of 23.8% and 28.5%, resp. Six months after completion of therapy, three patients relapsed (14.3%) and three (14.3%) had sustained virological response. Median Hb concentration decreased significantly after three and six months of ribavirin therapy (p=0.0002 and p=0.0003, resp.) leading to withdrawal of therapy in one patient. These preliminary results show that: (1) despite in vitro interactions between ribavirin, zidovudine, and stavudine, significant variation in HIV replication does not usually occur in HCV-HIV coinfecting patients receiving ribavirin and different antiretroviral regimens, including zidovudine and stavudine; (2) α interferon and ribavirin combination therapy induced primary and sustained virological responses in 28.5% and 14.3% of treated subjects (who were previous non-responders to interferon therapy), resp.; (3) anemia is a frequent adverse event. Such results should be confirmed in larger prospective trials.

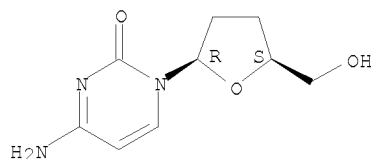
IT 7481-89-2, Zalcitabine

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(interferon- α and ribavirin combination therapy in humans
coinfecting with hepatitis C virus and HIV)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2000:443717 CAPLUS

DN 133:37763

TI Can HCV affect the efficacy of anti-HIV treatment?

AU Filippini, P.; Coppola, N.; Scolastico, C.; Liorre, G.; Nocera, R.; Sagnelli, E.; Piccinino, F.

CS Institute of Infectious Diseases, School of Medicine, Second University of Naples, Naples, Italy

SO Archives of Virology (2000), 145(5), 937-944

CODEN: ARVIDF; ISSN: 0304-8608

PB Springer-Verlag Wien

DT Journal

LA English

AB To evaluate the impact of new antiretroviral combinations (HAART: Highly Active Anti Retroviral Therapy) on HCV replication and liver enzyme levels, we analyzed the changes in HCV viremia and aminotransferase levels in HIV and HCV co-infected patients. Moreover, to evaluate the influence of HCV infection on the efficacy of HAART, we compared the virological, immunological and biochemical response to antiretroviral combinations in anti-HIV positive subjects with or without HCV infection. We enrolled eight consecutive outpatients with

HIV-HCV coinfection and with indications for HAART (Group A). For each patient in group A, we selected an anti-HIV neg. patient with indications for HAART, pair-matched for age, sex, risk factor for HIV infection, presumed duration of infection, number of CD4 cells, HIV viremia and treatment schedule (Group B). A statistically significant increase in CD4 in both groups was found at 1st, 3rd and 6th month of antiretroviral therapy. A decrease in HIV-RNA in both groups was observed at 1st and 6th month of treatment. The percentage of patients with undetectable HIV-RNA at the 1st month was higher in Group B than in Group A (8/8 vs. 3/8, $p = 0.025$). Basal HCV-RNA viremia was very high in each case and no variations during treatment were observed. During therapy the aminotransferase levels slightly decreased in Group A and consistently increased in Group B. In Group A the differences were not significant to the statistical anal.; in Group B the aminotransferase levels at 3rd and 6th month were significantly higher than those observed at the baseline.

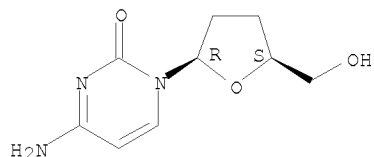
IT 7481-89-2, Zalcitabine

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(can HCV affect efficacy of anti-HIV treatment)

RN 7481-89-2 CAPLUS

CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1999:390423 CAPLUS

DN 131:39724

TI Cytotoxin fusion proteins for use in killing of cells infected by pathogens

IN Dowdy, Steven F.

PA Washington University, USA

SO PCT Int. Appl., 123 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

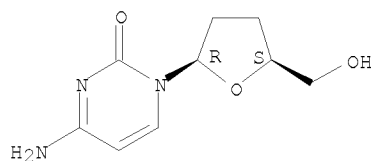
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| PI | WO 9929721 | A1 | 19990617 | WO 1998-US26358 | 19981210 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
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| | CA 2314267 | A1 | 19990617 | CA 1998-2314267 | 19981210 |
| | AU 9918182 | A | 19990628 | AU 1999-18182 | 19981210 |
| | EP 1037911 | A1 | 20000927 | EP 1998-963079 | 19981210 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | US 6221355 | B1 | 20010424 | US 1998-208966 | 19981210 |
| | JP 2002505077 | T | 20020219 | JP 2000-524312 | 19981210 |
| PRAI | US 1997-69012P | P | 19971210 | | |
| | US 1998-82402P | P | 19980420 | | |
| | WO 1998-US26358 | W | 19981210 | | |

AB A method of controlling infection by killing infected cells is described. more fusion proteins that includes a transduction domain and a cytotoxic domain. The method uses fusion proteins of cytotoxins and a

protein that directs entry into the cell (a transduction domain). The cytotoxic domain is specifically activated by a pathogen infection, e.g. by being processed by an infection-specific protease. Activation of the cytotoxin effectively kills or injures cells infected by one or a combination of different pathogens. The cytotoxin may be a protease or a prodrug-activating enzyme such as a thymidine kinase. In particular the method is directed at the treatment of HIV infection. Suitable transduction domains can be obtained from, inter alia, the tat protein, the Antennapedia gene product, and VP22 of herpes simplex virus. The method appears to be effective in transporting very large proteins into cells and can also tolerate a significant degree of unfolding or incorrect folding. A fusion protein of the TAT transduction domain and human caspase 3 (CPP-32) was shown to be effective at killing HIV-infected cells. The effect was blocked by the HIV proteinase inhibitor Ritonavir, and mutation of the active site cysteine to methionine.

IT 7481-89-2, DdC
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (in combination treatment of infection; cytotoxin fusion proteins for use in killing of cells infected by pathogens)
 RN 7481-89-2 CAPLUS
 CN Cytidine, 2',3'-dideoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

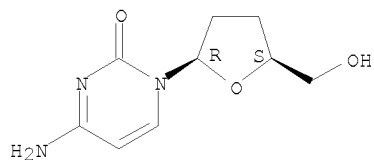
L13 ANSWER 46 OF 46 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 1998:147346 CAPLUS
 DN 128:213381
 OREF 128:42137a,42140a
 TI Compositions and methods for treating infections using analogs of indolicidin
 IN Fraser, Janet R.; West, Michael H. P.; Krieger, Timothy J.; Taylor, Robert; Erfle, Douglas
 PA Micrologix Biotech, Inc., Can.
 SO PCT Int. Appl., 130 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 9807745 | A2 | 19980226 | WO 1997-US14779 | 19970821 |
| WO 9807745 | A3 | 19980709 | | |
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| CA 2263799 | A1 | 19980226 | CA 1997-2263799 | 19970821 |
| AU 9743279 | A | 19980306 | AU 1997-43279 | 19970821 |
| EP 925308 | A2 | 19990630 | EP 1997-941352 | 19970821 |
| EP 925308 | B1 | 20020605 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2001500477 | T | 20010116 | JP 1998-510994 | 19970821 |
| EP 1174439 | A2 | 20020123 | EP 2001-119148 | 19970821 |
| EP 1174439 | A3 | 20030326 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |

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| AT | 218579 | T | 20020615 | AT | 1997-941352 | 19970821 |
| ES | 2178000 | T3 | 20021216 | ES | 1997-941352 | 19970821 |
| HK | 1021824 | A1 | 20030221 | HK | 1999-106212 | 19991230 |
| US | 20040009910 | A1 | 20040115 | US | 2003-351985 | 20030124 |
| US | 7390787 | B2 | 20080624 | | | |
| JP | 2005225857 | A | 20050825 | JP | 2004-242925 | 20040823 |
| JP | 4073900 | B2 | 20080409 | | | |
| PRAI | US 1996-24754P | P | 19960821 | | | |
| | US 1997-34949P | P | 19970113 | | | |
| | US 1997-915314 | A1 | 19970820 | | | |
| | EP 1997-941352 | A3 | 19970821 | | | |
| | JP 1998-510994 | A3 | 19970821 | | | |
| | WO 1997-US14779 | W | 19970821 | | | |
| | US 2000-667486 | A1 | 20000922 | | | |
| OS | MARPAT 128:213381 | | | | | |
| AB | Comps. and methods for treating infections, especially bacterial infections, are provided. Indolicidin peptide analogs containing at least two basic amino acids are prepared. The analogs are administered as modified peptides, preferably containing photo-oxidized solubilizer. | | | | | |
| IT | 7481-89-2, Zalcitabine | | | | | |
| | RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) | | | | | |
| | (indolicidin analogs, and combinations with other agents, for treating infections) | | | | | |
| RN | 7481-89-2 | CAPLUS | | | | |
| CN | Cytidine, 2',3'-dideoxy- (CA INDEX NAME) | | | | | |

Absolute stereochemistry. Rotation (+).



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(FILE 'HOME' ENTERED AT 11:06:27 ON 30 AUG 2008)

FILE 'REGISTRY' ENTERED AT 11:07:04 ON 30 AUG 2008

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| L2 | STRUCTURE UPLOADED |
| L3 | STRUCTURE UPLOADED |
| L4 | 20 S L1 |
| L5 | 2 S L2 |
| L6 | 1 S L3 |
| L7 | 7 S L2 FULL |
| L8 | 10 S L3 FULL |

FILE 'CAPLUS' ENTERED AT 11:10:19 ON 30 AUG 2008

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| L10 | 5 S L9 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE) |
| | S L1 |

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L11 666 S L1 FULL

FILE 'CAPLUS' ENTERED AT 11:12:21 ON 30 AUG 2008

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| L13 | 46 S L12 AND (FLAVIVIRUS OR PESTIVIRUS OR HCV OR FLAVIVIRIDAE) |

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| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
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| FULL ESTIMATED COST | 260.62 | 834.46 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |

McIntosh

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| | ENTRY | SESSION |
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| CA SUBSCRIBER PRICE | -36.80 | -40.80 |

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DICTIONARY FILE UPDATES: 29 AUG 2008 HIGHEST RN 1044824-41-0

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L15 STRUCTURE UPLOADED

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BATCH **COMPLETE**
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|-----------------------|----------------|------------|
| 100.0% PROCESSED | 928 ITERATIONS | 59 ANSWERS |
| SEARCH TIME: 00.00.01 | | |

L18 59 SEA SSS FUL L15

| | SINCE FILE | TOTAL |
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| | ENTRY | SESSION |
| => file caplus | | |
| COST IN U.S. DOLLARS | | |

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| | | |
|--|------------|---------|
| FULL ESTIMATED COST | 357.18 | 1191.64 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -40.80 |

FILE 'CAPLUS' ENTERED AT 11:15:48 ON 30 AUG 2008
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FILE COVERS 1907 - 30 Aug 2008 VOL 149 ISS 10
FILE LAST UPDATED: 29 Aug 2008 (20080829/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

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=> s 117 or 118
      69 L17
      208 L18
L19    274 L17 OR L18
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=> s 119 and ((orthomyxoviridae OR "Influenza virus") OR "Orthomyxovirus" or (paramyxoviridae OR "Mumps virus") OR "Respiratory syncytial virus" OR "Human metapneumovirus" OR "Sendai virus")
      241 ORTHOMYXOVIRIDAE
      27037 "INFLUENZA"
      12 "INFLUENZAS"
      27043 "INFLUENZA"
            ("INFLUENZA" OR "INFLUENZAS")
      393798 "VIRUS"
      82981 "VIRUSES"
      408732 "VIRUS"
            ("VIRUS" OR "VIRUSES")
      18225 "INFLUENZA VIRUS"
            ("INFLUENZA" (W) "VIRUS")
      281 "ORTHOMYXOVIRUS"
      107 "ORTHOMYXOVIRUSES"
      342 "ORTHOMYXOVIRUS"
            ("ORTHOMYXOVIRUS" OR "ORTHOMYXOVIRUSES")
      485 PARAMYXOVIRIDAE
      1743 "MUMPS"
      393798 "VIRUS"
      82981 "VIRUSES"
      408732 "VIRUS"
            ("VIRUS" OR "VIRUSES")
      917 "MUMPS VIRUS"
            ("MUMPS" (W) "VIRUS")
      137601 "RESPIRATORY"
      4 "RESPIRATORIES"
      137604 "RESPIRATORY"
            ("RESPIRATORY" OR "RESPIRATORIES")
      5798 "SYNCYTIAL"
      393798 "VIRUS"
      82981 "VIRUSES"
      408732 "VIRUS"
            ("VIRUS" OR "VIRUSES")
      4333 "RESPIRATORY SYNCYTIAL VIRUS"
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2039160 "HUMAN"
362131 "HUMANS"
2212177 "HUMAN"
("HUMAN" OR "HUMANS")
397 "METAPNEUMOVIRUS"
31 "METAPNEUMOVIRUSES"
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326 "HUMAN METAPNEUMOVIRUS"
("HUMAN" (W) "METAPNEUMOVIRUS")
4105 "SENDAI"
393798 "VIRUS"
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408732 "VIRUS"
("VIRUS" OR "VIRUSES")
3249 "SENDAI VIRUS"
("SENDAI" (W) "VIRUS")
L20 4 L19 AND ((ORTHOMYXOVIRIDAE OR "INFLUENZA VIRUS") OR "ORTHOMYXOVIRUS" OR (PARAMYXOVIRIDAE OR "MUMPS VIRUS") OR "RESPIRATORY SYNCYTIAL VIRUS" OR "HUMAN METAPNEUMOVIRUS" OR "SENDAI VIRUS")

=> d bib abs hitstr 1-4 l20

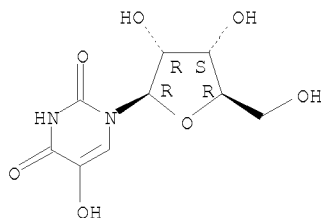
L20 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:492694 CAPLUS
DN 139:47125
TI Induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA, and drug screening method
IN Loeb, Lawrence A.; Mullins, James I.
PA University of Washington, USA
SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 958,065.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | US 20030119764 | A1 | 20030626 | US 2000-522373 | 20000310 |
| | US 6887707 | B2 | 20050503 | | |
| | US 6063628 | A | 20000516 | US 1997-958065 | 19971027 |
| | US 20050187180 | A1 | 20050825 | US 2005-98796 | 20050404 |
| PRAI | US 1996-29404P | P | 19961028 | | |
| | US 1997-40535P | P | 19970227 | | |
| | US 1997-958065 | A2 | 19971027 | | |
| | US 2000-522373 | A3 | 20000310 | | |
| AB | The present invention is directed to the identification and use of ribonucleoside analogs to induce the mutation of an RNA virus, including BVDV, HIV and HCV, or a virus which otherwise replicates through an RNA intermediate. The increase in the mutation rate of the virus results in reduced viability of progeny generations of the virus, thereby inhibiting viral replication. In addition to these methods and related compns., the invention provides methods and combinatorial chemical libraries for screening ribonucleoside analogs for mutagenic potential. | | | | |
| IT | 957-77-7, 5-Hydroxyuridine 957-77-7D, 5-Hydroxyuridine, derivs. RL: BSU (Biological study, unclassified); CUS (Combinatorial use); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); USES (Uses) (induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA, and drug screening method) | | | | |
| RN | 957-77-7 CAPLUS | | | | |
| CN | Uridine, 5-hydroxy- (CA INDEX NAME) | | | | |

Absolute stereochemistry.

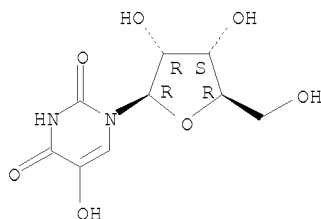
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RN 957-77-7 CAPLUS
CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:314958 CAPLUS
DN 136:340939
TI Preparation of modified nucleosides for treatment of viral infections and
abnormal cellular proliferation
IN Stuyver, Lieven; Watanabe, Kyoichi A.
PA Pharmasset Limited, USA
SO PCT Int. Appl., 230 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| PI | WO 2002032920 | A2 | 20020425 | WO 2001-US46113 | 20011018 |
| | WO 2002032920 | A3 | 20040219 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| | CA 2426187 | A1 | 20020425 | CA 2001-2426187 | 20011018 |
| | AU 2002028749 | A | 20020429 | AU 2002-28749 | 20011018 |
| | US 20030087873 | A1 | 20030508 | US 2001-45292 | 20011018 |
| | EP 1411954 | A2 | 20040428 | EP 2001-987756 | 20011018 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR | | | |
| | JP 2004533406 | T | 20041104 | JP 2002-536301 | 20011018 |
| | CN 1646141 | A | 20050727 | CN 2001-820816 | 20011018 |
| | BR 2001014837 | A | 20060509 | BR 2001-14837 | 20011018 |
| | AU 2002228749 | B2 | 20080424 | AU 2002-228749 | 20011018 |
| | US 20070031824 | A1 | 20070208 | US 2004-854870 | 20040527 |
| | US 20070196824 | A1 | 20070823 | US 2007-686499 | 20070315 |
| | AU 2007240180 | A1 | 20080103 | AU 2007-240180 | 20071207 |
| | KR 2008041296 | A | 20080509 | KR 2008-707867 | 20080331 |
| PRAI | US 2000-241488P | P | 20001018 | | |

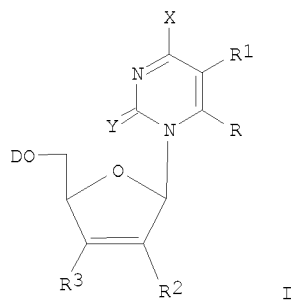
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| | | |
|-----------------|----|----------|
| US 2001-282156P | P | 20010406 |
| US 2000-256067P | P | 20001215 |
| US 2001-8140 | B1 | 20011018 |
| WO 2001-US46113 | W | 20011018 |
| KR 2003-705461 | A3 | 20030418 |
| US 2004-854870 | A3 | 20040527 |

OS MARPAT 136:340939

GI



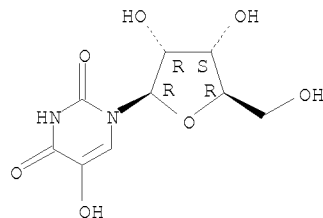
AB Modified nucleosides, e.g. I, wherein D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid; X is H, halogen, NH₂, substituted amine, oxime, OH, alkoxy, SH, thioalkyl; Y is O, S, Se; R and R₁ are independently H, alkyl, alkenyl, alkynyl, aryl, alkylaryl, halogen, NH₂, substituted amine, oxime, hydrazine, OH, alkoxy, SH, thioalkyl, NO₂, NO, CH₂OH, CH₂OH, ester, CONH₂, amide, CN; R₂ and R₃ are independently H, halogen, OH, SH, OMe, SMe, NH₂, NHMe, CH:CH₂, CN, CH₂NH₂, CH₂OH, CO₂H; were prepared for treating a Flaviviridae (including BVDV and HCV), Orthomyxoviridae (including Influenza A and B) or Paramyxoviridae (including RSV) infection, or conditions related to abnormal cellular proliferation, in a host, including animals, and especially humans. This invention also provides an effective process to quantify the viral load, and in particular BVDV, HCV or West Nile Virus load, in a host, using real-time polymerase chain reaction ("TR-PCR"). Addnl., the invention discloses probe mols. that can fluoresce proportionally to the amount of virus present in a sample. Thus, (1'R,2'S,3'R,4'R)-1-[2,3-dihydroxy-4-(hydroxymethyl)cyclopentan-1-yl]-5-fluorocytosine was prepared and tested in vitro as antiviral and antitumor agent.

IT 957-77-7P 69321-95-5P 170421-84-8P
415705-12-3P 415705-25-8P
RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of modified nucleosides for treatment of viral infections and abnormal cellular proliferation)

RN 957-77-7 CAPLUS

CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.



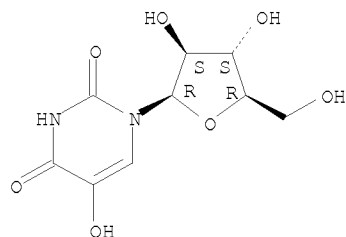
RN 69321-95-5 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1-β-D-arabinofuranosyl-5-hydroxy- (CA INDEX NAME)

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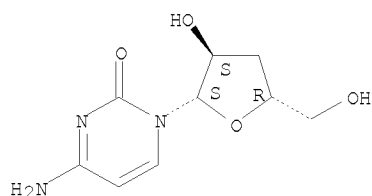
Absolute stereochemistry.



RN 170421-84-8 CAPLUS

CN 2(1H)-Pyrimidinone, 4-amino-1-(3-deoxy- β -L-erythro-pentofuranosyl)-
(CA INDEX NAME)

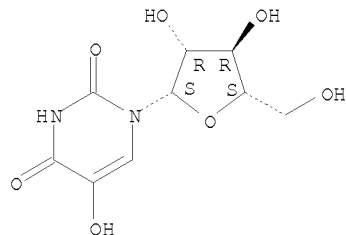
Absolute stereochemistry.



RN 415705-12-3 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 1- β -L-arabinofuranosyl-5-hydroxy- (CA
INDEX NAME)

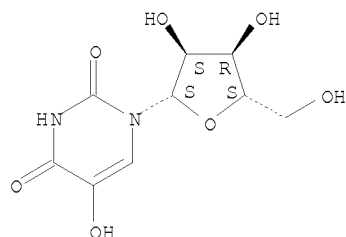
Absolute stereochemistry.



RN 415705-25-8 CAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-hydroxy-1- β -L-ribofuranosyl- (CA INDEX
NAME)

Absolute stereochemistry.



IT 7057-33-2P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of modified nucleosides for treatment of viral infections and
abnormal cellular proliferation)

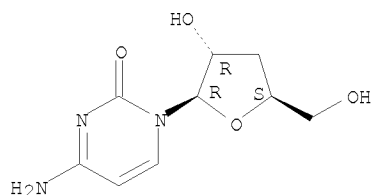
RN 7057-33-2 CAPLUS

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CN Cytidine, 3'-deoxy- (7CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L20 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1998:293319 CAPLUS

DN 129:579

OREF 129:147a,150a

TI Induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA

IN Loeb, Lawrence A.; Mullins, James I.

PA University of Washington, USA

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|--|----------|-----------------|----------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | WO 9818324 | A1 | 19980507 | WO 1997-US19670 | 19971027 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | |
| | RW: | GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | CA 2269213 | A1 | 19980507 | CA 1997-2269213 | 19971027 |
| | AU 9850959 | A | 19980522 | AU 1998-50959 | 19971027 |
| | AU 740916 | B2 | 20011115 | | |
| | EP 948256 | A1 | 19991013 | EP 1997-913882 | 19971027 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| | NZ 335000 | A | 20001222 | NZ 1997-335000 | 19971027 |
| | JP 2001525797 | T | 20011211 | JP 1998-520739 | 19971027 |
| | NZ 507848 | A | 20050128 | NZ 1997-507848 | 19971027 |
| PRAI | US 1996-29404P | P | 19961028 | | |
| | US 1997-40535P | P | 19970227 | | |
| | WO 1997-US19670 | W | 19971027 | | |

AB The invention is directed to the identification and use of ribonucleoside analogs to induce the mutation of an RNA virus, including HIV and HCV, or a virus which otherwise replicates through an RNA intermediate. The increase in the mutation rate of the virus results in reduced viability of progeny generations of the virus, thereby inhibiting viral replication. In addition to these methods and related compns., the invention provides methods and combinatorial chemical libraries for screening ribonucleoside analogs for mutagenic potential.

IT 957-77-7, 5-Hydroxyuridine 957-77-7D, 5-Hydroxyuridine, derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(induction of viral mutation by incorporation of miscoding ribonucleoside analogs into viral RNA, and screening method)

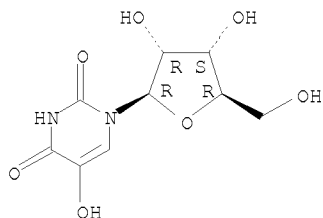
RN 957-77-7 CAPLUS

CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

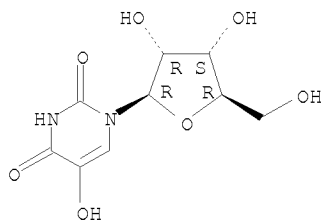
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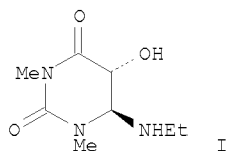
RN 957-77-7 CAPLUS
CN Uridine, 5-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1995:689228 CAPLUS
DN 123:340717
OREF 123:61171a,61174a
TI Studies on the chemistry of pyrimidine derivatives with dimethyldioxirane: synthesis, cytotoxic effect and antiviral activity of new 5,6-oxiranyl-5,6-dihydro and 5-hydroxy-5,6-dihydro-6-substituted uracil derivatives and pyrimidine nucleosides
AU Saladino, Raffaele; Bernini, Roberta; Crestini, Claudia; Mincione, Enrico; Bergamini, Alberto; Marini, Stefano; Palamara, Anna Teresa
CS Dip. Agrochim. Agrobiol., Univ. Viterbo "La Tuscia", Viterbo, 01100, Italy
SO Tetrahedron (1995), 51(27), 7561-78
CODEN: TETRAB; ISSN: 0040-4020
PB Pergamon
DT Journal
LA English
GI



AB The oxidation of uracil derivs. and pyrimidine nucleoside performed in CH₂Cl₂ with dimethyldioxirane afforded new 5,6-oxiranyl-5,6-dihydro and cis-/trans-5,6-dihydroxy-5,6-dihydro-derivs. When the oxidns. were performed in the presence of methanol as nucleophile cis- and trans-5-hydroxy-6-methoxy-5,6-dihydro derivs. were obtained in acceptable yields. Cis- and trans-1,3-dimethyl-5-hydroxy-6-alkylamino-5,6-dihydro uracils were obtained by nucleophilic ring opening of the 1,3-dimethyl-5,6-oxiranyl-5,6-dihydro uracil in the purified form. Interestingly some of the new title products revealed low cytotoxicity and selective antiviral activity against DNA and RNA Viruses. In particular, compound I shows a strong and selective inhibition of the Sendai virus with lower effect on Herpes Simplex-1 virus. Compound I is

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also able to slightly inhibit HIV-1 virus at high concns., but in this case a cytotoxic effect was observed

IT 24514-48-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and antiviral and cytotoxicity of oxiranyldihydro- and hydroxydihydro-substituted uracils and pyrimidine nucleosides)

RN 24514-48-5 CAPLUS

CN Uridine, 5,6-dihydro-5,6-dihydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

